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The JOURNAL Of The
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THE JOURNAL
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

The editors welcome letters from readers. The Journal is yours. Why not let the Editorial Board know what you think of it. Your comments, whether favorable or unfavorable, may be helpful.

THE AMERICAN ACADEMY OF GENERAL PRACTICE

In anticipation of the approaching meeting of the Oklahoma Academy of General Practice in Tulsa March 17 and 18, 1952, it is gratifying to contemplate the accomplishments of this organized group of America's leading benefactors in the field of medical care. How farsighted the leaders in this group and how fortunate those who have joined in the foundation of a powerful organization for the advancement of medical knowledge and its application in behalf of society. But most of all in defense of medical freedom which is so important for both the profession and the people throughout the so-called democratic world.

Having lost freedom, income and caste and having been woefully overworked under the will of the Ministry of Health and the wiles of their government patients, the general practitioners in Great Britain are contemplating a similar organization with the faint hope of retrieving some of their losses. It is to be hoped that the American Academy of General Practice will lock the barn door before the horse is stolen and that they may have a powerful guard of satisfied patients ready to pounce upon the stealthy thieves masquerading under the guise of Federal Security. Is there anything more despicable than the defamation of a good name! The wolf in sheep's clothing thinks only of his own security. Academy beware! Your organization must become the people's bulwark of freedom.

PHYSICAL DIAGNOSIS

For years the matter of physical diagnosis has been a controversial subject for committees on medical school curriculums. This has come about largely because of laboratory and other accessory diagnostic procedures, particularly the Roentgen ray. With reference to the chest it has been said, "this is the day of Roentgen, the day of Laennec is past." Considering all the implications this is unfortunate, especially in this era when physicians are taught to expect and to welcome short cuts. While it is true that "the stationary condition is the beginning of the end," too rapid progress may prove hazardous.

Several years ago H. R. M. Landis, after reading Lhevine's work on the heart was amazed to find that a physician whose professional experience had been so hedged about by academic influence could write a book so practical for the general practitioner. In a letter to the present writer, Landis discussed the trends in medical teaching and lamented the fact that interns, house officers and other young physicians walked the wards with long laboratory reports on the charts, an x-ray interpretation in one pocket and a cardiogram in the other while the patient longed for the contact and conversation incident to a physical examination and while the physician was missing the throbbing living testimony of the patient's personality and the body's response to pathology as discovered by the five senses.

This trend has not been altered and the loss has been obvious to those members of the profession who learned to follow Hippocrates and Laennec.

Under the stimulus of recent reports concerning the limited knowledge and skill on the part of senior medical students when confronted with patients presenting obvious abnormal physical signs, the writer has scanned some of the recent texts on physical and medical diagnosis in order to see if the deficiency arises through textbook inadequacies or insufficient physical exploration and demonstration. Apparently the fault lies in the latter and the implication is that the teaching of physical diagnosis is being neglected.

To make sure of the modern viewpoint *Medical Diagnosis-Applied Physical Diagnosis* by Pullen[1] was included. It is one of the best illustrated and most comprehensive of the texts now available and its teachings are sound. If the principles and methods

presented in the modern books on diagnosis were properly taught the student could hardly escape a knowledge of their practical application. Perhaps the tendency to consider courses in physical diagnosis only part of medical diagnosis with definite limitations has led to its neglect without sufficient emphasis on physical examination in connection with the broader concept referred to as medical diagnosis.

At least concentration on physical diagnosis made direct contact with the patient, educated the senses, accustomed the examiner to the feel of the flesh with opportunity to learn the normal and to detect the abnormal. It established the patient-physician relationship with profit to the examiner and satisfaction to the patient. Perhaps the most important phase of the complex process is the development of the habit of physical examination applicable to any structure or organ of the body before running to the laboratory for help. Properly pursued, medical diagnosis becomes an exciting game with warm living evidence to guide laboratory investigations, Roentgen ray examinations, and other tests for corroboration.

In the recent issue of the *British Medical Journal* there is a tribute to the well known consultant Sir Robert Young who had reached the rank of octogenarian. He helped to make important decisions during the king's illness. The following from this tribute adds force to the above discussion:

"One of the characteristics of Sir Robert Young's work by which he will always be remembered is his thoroughness in the examination of the patient. The young physician who leapt to the radiograph and then called in Sir Robert for help in diagnosis was over and over again courteously shown how much could be discovered by the time-honoured method of inspection, palpation, percussion, and auscutation. While he has welcomed all the modern accessories for diagnosis and treatment, he has constantly reminded his younger colleagues of the importance of clinical instinct—what he once described as the "mind's eye" — or sixth sense, really the summation of the knowledge which comes from scientific observation, assistance by the methodical and accurate use of all the five senses and by drawing upon the stores of experience. He has suggested, while protesting that he is no reactionary, that in these days, with the plethora of modern methods, the patient is in some danger of being over-investigated and over-treated."

1. Medical Diagnosis-Applied Physical Diagnosis. Edited by Roscoe L. Pullen, M.D., F.A.C.P., Second Edition with 601 figures, 48 in color. W. B. Saunders Company, Philadelphia and London, 1950. Reviewed in the November, 1950, issue of the *Journal of the Oklahoma State Medical Association*.

PSYCHOSOMATIC MEDICINE

In books, medical journals and popular magazines much space has been devoted to the relatively new term which has merely highlighted an old concept and to some extent confused physicians who have unobtrusively followed this time honored practice, well known since the time of Hippocrates.

Popular publicity with reference to this so-called new practice on the intellectual level has not eased the mass psychology with reference to disease. The attempt to bring about a universal consciousness of the influence of mind over body has not emptied any beds in either psychiatric or general haspitals. Many people have acquired an exaggerated idea of what fear and anxiety can do to them. Believing what they hear and what they read some of them have lost confidence in their doctors, assuming that they have something new to learn and that their patients have suffered because of their implied limitations. The alert general practitioner with years of experience knows all the psychosomaticist claims though he might not recognize what he knows in the psychiatrist's language.

Pope knew the danger of a little learning and he helped the world to realize that it may utterly destroy the bliss of ignorance. In justification of the above, attention is called to an editorial[1] in the *New England Journal of Medicine* entitled, "Stark Unreality." These lines are sufficient to reveal the temper of the author.

"Psychotherapy of various kinds has fairly well proved its value. However, in the development termed 'psychosomatic medicine' hopes and assumptions have been insinuated as facts when proof convincing to the unbiased is not present. The movement is far enough out of critical hands to permit a gullible, unknowing public to believe that it can worry itself into heart disease, hypertension and thyrotoxicosis,—in addition to peptic ulcer,—or, shortly, if divinations go on space, into almost any disease that has previously been classified as predominantly of organic or exogenous origin. Although unpopular and semi-scientific journalism are inculpated, the too enthusiastic and uncritical psychosomaticists themselves are primarily responsible. Certain personality types have been concocted, reputedly

prone to develop characteristics diseases. Nonsupporting or insufficient data do not impede the will to believe."

In further corroboration the following is being copied from the editorial columns of the *British Medical Journal*[2] under the title, "Psychosomatic Medicine."

"With the ever-increasing burden of psychosomatic literature, mainly originating in America, it is important to pause and review the contribution being made to medicine by this movement. It is essentially a reaction against thinking of disease only in such terms as bacterial invasion, hormonal imbalance, or physical change in the body. Psychosomatic medicine implies that disease may be the sequel of nervous or emotional stress — for example, a maladaptation, or loss of power of bodily compensation, to increased autonomic stimulation from the higher centres."

". . . How much of this rests on a solid foundation and how much is due to the missionary zeal of those converted to a new faith?"

After a long discussion of the questionable aspects of psychosomatic medicine and the admission that its chief contribution consists of emphasis on well known but often neglected facts, the editorial closes with this significant statement, "But 'psychosomatic' is an unnecessary term, and the sooner it is dropped from the current literature the better."

Simultaneously the proceedings of the Royal Society of Medicine carries an incomprehensive article, "Psychosomatic Medicine and Psychotherapy" by Ernst Kretschmer, M.D., Professor of Neurology and Psychiatry in the University of Tubingen. Professor Kretschmer summarizes five paragraphs of high priced words by saying that "the whole organism, then, can be likened to the belly of a violin which resonates sympathetically with the vibration of one of its strings at one moment strong and at another feeble."

After pages of psychotherapy in which "classical lengthy analyses" are omitted in favor of "a thorough all-embracing analysis of current conflicts" . . . "active fractional hypnosis" as derived from Schultz' "autogenes training" is advised except where lack of intelligence makes the older methods of hypnotic suggestion more desirable, we follow through innumerable so-called psychosomatic types with equally protean methods of therapy to the following confusing statement, "If we are to grasp the full implications of these principles, we must yet again modify our traditional approach to clinical problems. We are still far too apt to think of an organic disease in terms of X-ray photographs and anatomical specimens and to allow our ideas of what has been happening in the living organism to derive from these abstractions . . . an X-ray plate is not a living oracle, still less an accurate mathematical formula of the course of an illness. It is nothing more than a photographic record of a single instant from a long sequence of functional events. The pathological process itself is rarely as fixed and definitive as its pictorial representation. The anatomical changes are usually the end-product of a long sequence of pathological processes. Further, the anatomical lesions themselves have, in the meantime, given rise to secondary dysfunction. Again, the irreversibility of the morbid process suggested by the X-ray picture may be only an appearance, for it often happens that appropriate psychotherapy may release potentialities for healing latent in the diseased area itself."

After all this the author reports one case in support of his position.

1. New England Journal of Medicine, Vol. 245, No. 20, page 786, November 15, 1951.
2. British Medical Journal, November 10, 1951, page 1136.
3. Proceedings of the Royal Society of Medicine, Vol. 33, page 965.

"TO ALL MY PATIENTS"

In this day when people must be reminded of common decency through organized effort known as public relations is there a single member of the State Medical Association who can afford to be indifferent about the patient-physician relationship? To save conversation and at the same time conserve good relations in spite of the pressure under which most active physicians work, the chaste attractive desk plaque discussing fees and favoring friendly understanding is recommended to every physician whether general practitioner or specialist. The Executive Office of your State Association awaits your order.

This courteous service to your patients will make Oscar Ewing unhappy; it will lighten the work of the Grievance Committee and serve as good evidence in court when unjust charges are made.

See

PLAQUE

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THE YOUTH OF THE LAND

Through all channels we are buffeted about by successive waves of alarm over the irresponsible attitude of youth toward law and order. Riding the crest of every wave is a serious question which can be answered in a split second by anybody who has a grain of common sense. Briefly the answer is to be found in wholesale urbanizations, motorized transportation, gageted domestication, uncontrolled movies and other audio and visual methods of amusement resulting in relative illiteracy through the lack of constructive reading. Add the comics and so-called progressive education and summer camps where uninhibited self expression is encouraged and the resulting youthful psychology is ready for the adult discussion of unprincipled commercialism, uncurbed corruption and moral depravity in government and other high places. How wonderful our young people are considering parentage, education, moral and socio-economic environment. All this is of medical interest because of the impact upon mental and physical well being.

Under such circumstances the young people are not prepared for the uncertain future in this atomic age. Bertrand Russell in his book *New Hopes for a Changing World*, sounds an awful warning. Using his words, "As I write I do not know—no one knows—whether New York or London will exist six months hence."

Assuming that civilization may be doomed he offers this ironical consolation:

"Perhaps somewhere else, in some distant nebula, some unimportant star has an unimportant planet on which there are rational beings. Perhaps in another million years their instruments will tell them of our fate, and lead them to agree on an agenda for a conference of foreign ministers. If so, man will not have lived in vain."

For America, there is one last ray of hope. The people of the U. S. have done what no other nation has ever done before in a comparable way — they have generously given financial and moral support to other nations where survival is uncertain. With the prevalent warning of malfeasance in high places in our own land and the present plight of other nations a girding of loins with a will for reform may result in unprecedented salvation. According to archeologists, twenty civilizations have failed. Shall the people of the U. S. dig themselves out or shall they accept ignoble defeat and commit this civilization to curious excavators in centuries to come?

So long as grownups neglect Forester's *Two Cheers for Democracy* and make a best seller of Houser's *Look Younger, Live Longer*, and so long as they wink at corruption and misrule in government, we cannot expect the rising generation to arrive at moral and socio-economic maturity.

A CURB ON PATIENTS

In connection with its stand against socialized medicine the Journal has maintained that if the Administration achieves its purpose, the people will suffer equally with the physicians.

Though the insult to them and the evil effects may be immediately less obvious in time the abnormal relationship, the false implications and the temptations to abuse privileges will wreck the golden rule and make unreasonable demands resulting in a rancor which is the normal offspring of compulsion.

In America physicians have a public relations committee for voluntary cooperation in good will. Under the socialized system, members of the British Medical Association, according to a Reuters report, are offering 30 proposals "aimed at reforming the free-for-all health service" and believe it or not, one of the these petitions asks the government for "permission to fine patients who call them out on frivolous complaints or who refuse to follow doctor's orders."

Is it possible for us to profit by exemple?

THE A.M.A. PLEDGE TO MEDICAL EDUCATION

Whether or not the A.M.A. fully met its pledge to medical education for the year 1951, forward looking physicians must know that the medical schools will need help in 1952. It is not wise to wait until December. The deduction holds from January to January. This is a rare opportunity. The physician can give in opposition to government paternalism and cut his income returns thus limiting the government's store for subsidies.

No living physician has fully paid for his medical education. It is high time. Send your check direct to the American Medical Association Education Foundation or to the State Executive Office.

At the Clinical Session of the A.M.A. in Los Angeles, the A.M.A. announced an additional contribution of $500,000.

SCIENTIFIC ARTICLES

SPONTANEOUS RUPTURE OF THE ESOPHAGUS*

ROBERT L. ANDERSON, M.D.
TULSA, OKLAHOMA

In discussing this subject, I would like to bring out the following points. First, even though rupture of the esophagus is a relatively uncommon condition, it is my opinion that it is more common than is generally thought. Second, anyone in practice who sees patients with acute abdominal conditions is likely to see such a case at any time. Third, it is often not thought of; however, the diagnosis can easily be made if the possibility enters one's mind. Fourth, there are certain symptoms and physical findings with which one can make a definite diagnosis. Fifth, one can expect reasonably good results from immediate, definitive treatment. It therefore, behooves all of us to think of the condition and make an early diagnosis if we are to expect satisfactory results.

By spontaneous rupture is meant a rupture of the esophagus that is presumably normal before the perforation occurs. It is not associated with disease in or around the esophagus or with manipulation of or a foreign body within the esophagus.

The first case of spontaneous rupture of the esophagus was reported in 1724 by Boerhaave.[7] In 1946 there were reported by Barrett,[9] only 50 cases in the literature, all without survival. The first clinical diagnosis of this condition was made by Meyer in 1858,[11] approximately 150 years after the first case was described. The first case that recovered was reported in the literature by Barrett in 1946,[9] approximately 100 years after the first clinical diagnosis and 250 years after the disease was first recognized. Since that time, several other cases have recovered from this catstrophe.[1,2,6,8,9,11,13]

Four cases have been observed in the city of Tulsa in the last two years, all of which have been diagnosed clinically and treated with recovery. This, to my knowledge, is the largest series reported in which all the cases survived.

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 21, 1951.

ETIOLOGY

The cause of this condition is not too well established. It is felt that it is due to an increase in the intraluminal pressure within the esophagus. The rupture is nearly always in the terminal three or four inches of the esophagus. This represents the weakest portion of the esophageal wall. Experimentally, the esophagus will rupture when a pressure of five and three-quarters to 11 pounds per square inch is applied, the average being seven pounds per square inch.[11] The rupture is nearly always longitudinal and located on the anterior surface of the esophagus.

It has been pointed out by some observers that it is the rapidity of the increase in pressure and not the total increase in pressure that accounts for the rupture.[11,7] One case has been reported of rupture of the esophagus following a blow on the abdomen presumably due to sudden increase of pressure within the esophagus.[1]

It is probably true that rupture of the esophagus is more likely to occur with the stomach full.[11,14] However, cases have been reported of recurrent vomiting and retching that have caused rupture of the esophagus with the stomach empty. Although this condition occurs in a presumably normal esophagus, in reviewing the cases that have been reported, a large majority of the patients had a history of peptic ulcer or had been excessive drinkers of alcoholic beverages.[2,3,5,6,7,8,9,10,11,12,13,14]

It is my opinion that, while they have had no symptoms of esophageal disease, many of these cases have changes within the wall of the esophagus, either due to local disease or systemic conditions. Possible exceptions to this statement will be in those individuals in which persistent vomiting is associated with neurological lesions or with pregnancy. Occasionally, forceful swallowing in an attempt to dislodge an impacted food bolus or

foreign body will cause rupture of the esophagus.

Generally speaking, therefore, any series of circumstances that will cause over-distention or sudden increase in pressure within the esophagus may cause spontaneous rupture. Perforation is more likely to occur when the esophagus is weakened by concurrent disease.

HISTORY

This condition is usually seen in men (84 per cent) between the ages of 35 and 55 years.[7] These patients are usually well-nourished and have enjoyed relatively good health previously. The onset of the condition is marked by sudden severe pain. This pain may be sub-sternal or epigastric. It is often so severe that the patient is writhing in agony and requires substantial narcotics to relieve it. The pain frequently occurs during or immediately following a large meal or an alcoholic bout. It frequently is preceded by vomiting or retching. In certain of the reported cases, the pain was not so severe at the onset but got progressively more severe within the next few hours. If the location of the pain is epigastric at the onset, within two to three hours the location of the pain shifts up into the region of the lower chest. Commonly it is on the left side and may radiate around into the back and up between the scapulae. Occasionally, as in one of our cases, the patient complains not so much of pain but of the fact that his neck and face have suddenly swollen because of the passage of air under the skin. Extreme thirst is a common complaint.

The past history may be entirely negative, but, as mentioned above, it often is suggestive of peptic ulcer or of chronic or acute alcoholism.

PHYSICAL EXAMINATION OF THE PATIENT

When the patient is seen in the examining room, he may be in profound shock due to the severe pain, or he may not. He is always pale and weak. The pulse is not greatly elevated, being between 90 and 100. The temperature is between 99 and 100 degrees. The respiration is always rapid, being around 30 to 35. The blood pressure is normal. The patient may be extremely short of breath and even cyanotic. This depends entirely upon the degree of chest pain and the presence or absence of fluid in the pleural cavity.

On examination, there may be found crepitus in the supraclavicular area, in the neck, and up into the face. If it is severe, it may also be found over the anterior wall. Examination of the chest may be entirely negative. On the other hand, if rupture into the pleural cavity has occurred, one will usually be able to make out the presence of fluid within the chest. This most frequently occurs on the left but may be on the right side or bilateral.

The abdomen is always very rigid and leads one to believe that the condition is within the abdominal cavity instead of the thoracic cavity. This has led to the misdiagnosis of rupture of an intra-abdominal viscus. Peristalsis is reduced. Otherwise, examination of the abdomen is negative.

LABORATORY EXAMINATION

The red cell count is elevated due to dehydration. The white blood cell count shows slight increase in neutrophils associated with a leukocytosis. X-ray examination reveals no free air beneath the diaphragm. Fluid may be present within the pleural cavity with a pneumothorax also present. X-ray may also reveal emphysema or a fluid level within the mediastinum. Subcutaneous emphysema is a prominent and important X-ray finding.

DIAGNOSIS

With the above findings and information, the diagnosis should be certain. However, other diagnostic procedures may well be carried out. These consist of aspiration of the fluid within the chest cavity. This fluid should be studied for food particles and tested for hydrochloric acid. If either is present, the diagnosis is certain. Often the odor and color of the fluid is important. The patient may be given a swallow of barium or lipiodol and, by means of fluoroscopy and X-ray examination, this media will outline the perforation and one can make out a peri-esophageal pocket or a direct communication into the pleural cavity.

If one is still in doubt, dye can be introduced into the esophagus and recovered by a needle within the pleural space and thus substantiate the diagnosis.

DIFFERENTIAL DIAGNOSIS

Ruptured esophagus is often confused with rupture of a peptic ulcer. In the latter condition, however, no subcutaneous emphysema is present. No fluid is found in the chest and usually free air is found beneath the diaphragm.

Acute pancreatitis, which may simulate this disease, will produce no emphysema and

is usually associated with a high blood amylase. Free fluid in the chest is occasionally seen with acute pancreatitis.

Mensentery thrombosis may cause simular pain and shock, but is not associated with emphysema or fluid in the chest.

Dissecting aneurysm of the aorta may produce any of the symptoms that have been outlined, except subcutaneous emphysema.

Coronary thrombosis should easily be ruled out by an electrocardiogram.

Pulmonary embolus may simulate this condition, but, again, does not produce subcutaneous emphysema.

Spontaneous pneumothorax may produce any of the symptoms just described including subcutaneous emphysema. However, the pain is usually much less severe, the prostration is less severe, and X-ray of the chest will invariably reveal some degree of collapse of the involved lung. Fluid may occur in spontaneous pneumothorax but that is not until 24 to 48 hours after the acute onset.

Rupture of a bronchus may produce severe mediastinal and subcutaneous emphysema together with collapse of the lung followed later by a fluid formation within the pleural cavity.

Neither of the last two conditions named are associated with vomiting, retching, or a full stomach. They rarely cause epigastric or sub-sternal pain, and they are almost never associated with epigastric tenderness and board-like rigidity of the abdomen.

Rupture of periesophageal hermation of the stomach into the mediastinum with extension into the pleural cavity may simulate rupture of the esophagus in every respect. However, by careful study by fluoroscopy and X-ray examination following barium swallow one should, in most cases, be able to demonstrate the herniated stomach and thus make the diagnosis. Since the treatment is the same as for ruptured esophagus, actually a differentiation of these two conditions is of only didactic importance.

TREATMENT

Treatment of spontaneous rupture of the esophagus may be divided into conservative management with simple drainage of the pleural cavity or a more radical procedure of thoracotomy with actual closure of the perforation.

In either case, the patient should first be treated for shock if shock is present. Blood and fluid should be given parenterally, as indicated.

If there is evidence of a tension pneumothorax with a partial collapse of one or both lungs, an under water suction drainage apparatus should be employed in order to immediately decompress the tension pneumothorax. This treatment in itself may be life-saving.

If mediastinal emphysema is marked and is interferring with vital functions, the mediastinum may be entered by making an incision above the supra-sternal through the anterior fascia and muscles of the neck. A catheter may then be introduced into the mediastinum in between the fascial planes and the mediastinal emphysema relieved.[4] Such a procedure can be done easily and quickly under local anesthesia.

The patient should receive nothing by mouth. Chemotherapy should be instituted immediately upon the patient's arrival and multiple parenteral antibiotics should be administered immediately in rather heroic doses.

If the diagnosis is in doubt, further diagnostic procedures such as barium study, lipiodol study, aspiration of the chest fluid for study, and X-ray of the chest and abdomen should be carried out as quickly as the patient's condition will permit. Only those procedures which are necessary for diagnosis should be carried out.

When a definite diagnosis has been reached, a thoracotomy should be carried out. If the patient's condition warrants it, the procedure of choice is surgical closure of the perforation and drainage of the mediastinum either retropleurally or through the pleural cavity, or both. The lung should be re-expanded and suction drainage should be instituted in order to maintain a negative pressure within the plueral cavity. Needless to say, at the time of the thoracotomy, the pleural cavity should be thoroughly cleansed and antibiotics should be instilled into the pleural space.

Should the patient's condition not tolerate closure of the perforation, then a simple thoracotomy should be carried out with cleansing of the pleural space. Adequate drainage should be maintained from the perforation to the outside either retro-

pleurally or through the pleural space. An attempt should be made to re-expand the lung and to maintain a negative pressure. The patient should receive blood and fluid as necessary during and after the operative procedure. It is my belief that, whether or not the perforation is closed, a Levine tube should be introduced into the esophagus, past the perforation, and into the stomach at the time of the thoractomy. The tube can then be used for decompression of the stomach as well as for feeding at a later time. These patients should receive nothing by mouth for at least seven days after surgery, at which time, if the patient's condition permits, small tube feedings should be instituted.

DISCUSSION

Spontaneous rupture of the esophagus can be confused with any acute abdominal emergency. However, there is a triad of signs and symptoms that is pathognomonic of this condition. This triad is: first, rapid respiration; second, rigidity of the abdomen; and third, crepitus in the neck due to subcutaneous emphysema.[9] Of these findings, the most important one is subcutaneous emphysema. One must always inspect the patient for emphysema and suspect ruptured esophagus if it is present.

Barium swallow or lipiodol instillation together with study of the pleural fluid, if it is present, and an X-ray of the chest and abdomen will substantiate the diagnosis. These procedures should be carried out, although the patient may be desperately ill, if the diagnosis is in doubt.

By these diagnostic methods, four cases of spontaneous rupture of the esophagus have been diagnosed and successfully treated in the past two years in the city of Tulsa. The prognosis of the patient is in direct relationship to the amount of time elapsing between the onset of the condition and the institution of treatment. It is, therefore, important that one arrive at a diagnosis and carry out the proper treatment as quickly as possible.

SUMMARY

(1) Spontaneous rupture of the esophagus is probably more common than is usually thought.

(2) The history, physical findings, diagnosis, and treatment of a typical case have been outlined and the importance of a diagnostic triad emphasized. This triad is: (a) rapid respiration, (b) abdominal rigidity, and (c) subcutaneous emphysema.

(3) The ultimate outcome is in direct relationship to the time elapsed between the onset of the disease and the institution of treatment. Therefore, every effort should be made toward an early diagnosis and adequate treatment.

(4) Four cases have been treated in the last two years, all with a correct clinical diagnosis and with adequate treatment followed by recovery.

BIBLIOGRAPHY

1. Aldrich, C. A., and Anspach, W. E., "Rupture o the Esophagus from a Blow on the Abdomen," Radiology, 32:93-95, 1938.
2. Benson, Clifford D., and Penberthy, Grover C., "Rupture of the Esophagus in a Child of Two Years with Recovery," Surgery, 4:777-780, 1948.
3. Clerf, Louis H., "Diseases of the Esophagus," Archives of Surgery, 41:1043-1059, 1940.
4. Coller, Frederick A., and Yglesias, Luis, "The Relation of Spread of Infection to Fascial Planes of the Neck and Thorax," Surgery, 1:323-337, 1937.
5. Collis, J. Leigh; Humphreys, D. R., and Bond, W. H., "Spontaneous Rupture of the Esophagus," The Lancet, 2:178-179, 1944.
6. Dunavant, David and Skinner, Edward F., "Spontaneous Rupture of the Esophagus," Surgery 29:527-531, April, 1951.
7. Eliason, E. L., and Welty, R. F., "Spontaneous Rupture of the Esophagus," Surgery, Gynecology, and Obstetrics, 83-234-238, August, 1946.
8. Frank, Norman William, "Spontaneous Rupture of the Esophagus," Journal of Thoracic Surgery, 16:291-293, 1947.
9. Gardner, Campbell McGregor, "Spontaneous Rupture of the Esophagus," Archives of Surgery, 59:710-713, 1949.
10. Kernan, John D., "Perforation of the Esophagus as a Surgical Emergency," Surgical Clinics of North America, 405-419, April, 1949.
11. Kinsella, Thomas J., and Morse, Russell W., and Hertzog, Ambrose J., "Spontaneous Rupture of the Esophagus," Journal of Thoracic Surgery, 17:629-637, 1948.
12. Layne, John A., and Hildebrand, Eugene, "Rupture of the Esophagus Following Sereve Vomiting," Gastroenterology, 13:170-174, 1949.
13. Moore, Julian, and Murphy, James D., "Spontaneous Rupture of the Esophagus," Journal of Thoracic Surgery, 17: 632-638, 1948.
14. Snead, Lewis F., "Spontaneous Rupture of the Esophagus," American Journal of Surgery, 13:497-501, 1931.
15. Wallfield, March J., "Pleural Manifestations of Perforation of the Esophagus," American Journal of Diseases of Children," 58:1261-1264, 1939.

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MANAGEMENT OF UROLOGICAL PROBLEMS IN GENERAL PRACTICE*

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The role of the general practitioner in the practice of medicine has been the subject of considerable discussion in this age of medical specialization. The purpose of this paper is to re-emphasize the role of the general practitioner in the management of urological problems and to attempt to define his relationship with the urologist.

There is no field in medicine which leads itself to more rapid and exact diagnosis than the specialty of urology. The genito-urinary tract permits excellent visualization by radiographic studies and direct observation. In addition, the products of the genito-urinary tract, such as urine, prostatic and vesicular secretions and semen are readily available for examination. The general practitioner need only apply his powers of observation, deduction and several simple laboratory procedures to arrive at a working diagnosis of the presenting urological problem. The expenditure of the small amount of time required to obtain an accurate history, observe the male patient void, collect the urine in two or three glasses, examine the genito-urinary tract and perform the simple procedure of urinalysis and microscopic examination of stained urinary sediment, prostatic secretions or semen can obviate the sins of omission and commission which are so prevalent. These sins consist of referring the patient to a specialist when the problem can be handled equally well by the family physician, ignoring obvious indications for a thorough urological examination and maintaining prolonged and unsuccessful treatment of a urological problem.

In addition to the management of specific urological problems, the general practitioner has the great opportunity and responsibility for the early detection of carcinoma of the prostate. This condition will be present in one out of five men over the age of 50 years. Cure of carcinoma of the prostate can be accomplished only by radical surgery. Since the early case is asymptomatic, the very life of the male over 50 is dependent upon the routine rectal examination and detection of small hard nodules in the prostate by his family physician. The reduction of carcinoma of the prostate mortality is the responsibility of the general practitioner. He and he alone can direct the suspicious case to early and complete cure.

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HEMATURIA

Hematuria is one of the most common and significant findings in urologic disease. It may be painless or painful. It may be gross or microscopic. It may be initial, terminal or mixed.

Painless hematuria denotes urologic malignancy in approximately 90 per cent of all cases. The prognosis for cure diminishes markely with each succeeding episode. For these reasons, the patient should be promptly dispatched to the urologist for thorough investigation. Procrastination and dilatory treatment are grossly injurious to both the patient and his physician.

Hematuria which is painful at the outset and which is associated with systemic manifestation and/or laboratory findings of associated infection and which is initial or terminal in appearance, suggests an inflammatory process involving the bladder, prostate or the urethra. Such a case may be properly treated with the appropriate drug based upon the presence of coccal or bacillary organisms found in the stained urinary sediment. Failure of the hematuria to disappear within a week or its early recurrence calls for prompt referral of the patient to the urologist.

The physician who temporizes with hematuria, jeopardizes the life of his patient.

URETHRITIS AND PROSTATITIS

Few conditions will bring a patient to his physician quicker than the appearance of a urethral discharge. To the layman, this bespeaks a venereal disease and too often his physician will casually agree and offer a "shot" of penicillin. If the offending organism is a penicillin sensitive gonococcus, all is well. However, many urethral exudates are

not primarily due to gonorrhea and such management fails to alleviate the complaint. Further than this, it subjects the patient to the unwarranted psychological trauma of having a "V.D." and undermines his confidence in the competence of his physician. A simple Gram stain of the exudate will differentiate between sepcific and non-specific urethritis.

One of the most common causes of nonspecific urethritis is an associated inflammatory process in the seminal tract. However, it is possible to have a purely localized urethritis and the exact diagnosis can be established by the three glass urine test and examination of prostatic and vesicular fluids. One should bear in mind that the inflammatory products in the prostatic secretions may not appear before the second examination.

The treatment of urethritis consists of the use of sulfonamides or one of the newer antibiotics (Penicillin is of little usefulness because of the usual mixed nature of the infection), massage of the urethra over a sound to break up small peri-urethral abscesses and promote better drainage, progressive urethral dilatation and the instillation of an antiseptic solution in the urethra.

Prostatitis with or without an associated seminal vesiculitis is the most common urological problem in the male. In the acute form, the physician should exercise extreme care in the manipulation of the prostate. Treatment consists of the use of the sulfonamides or the newer antibiotics plus the application of heat to the perineum by means of hot sitz baths or diathermy. The advent of modern therapeutic agents has made actual suppuration a rare complication, but when it does occur surgical drainage should be carried out promptly. The acute form of prostatitis has many gradients of severity and frequently resolves itself into the chronic form.

Chronic prostatitis may be properly compared to chronic sinusitis. Once the patient is aware of the fact that his prostate is like a sponge, with innumerable glands which drugs cannot always permeate, he is more inclined to cooperate with his physician in the management of the problem. Treatment of chronic prostatitis requires patience and diligence on the part of both the patient and his physician. Treatment should be confined to the periods of exacerbation only and not be permitted to drag on indefinitely. The sulfonamides are very useful, when tolerated; otherwise, a wide-spectum antibiotic may be used. The patient should refrain from alcohol and sexual intercourse and should take nightly hot sitz baths. Copious amounts of water aid in lavaging the inflamed urethra. Any one of the anti-spasmodic preparations is useful for relief of bladder tenesmus. In addition, the prostate should be massaged gently no oftener than twice a week at the outset and later once a week until such time as the microscopic appearance of the secretions has reached the maximum improvement. Simultaneously the bladder may be irrigated with a mild antiseptic such as potassium permanganate or acriflavine solution and the urethra progressively dilated with sounds. It is in regard to the use of sounds that I wish to speak a word of caution. Their use is extremely valuable, however, the occasional use of a metallic instrument in the urethra is fraught with considerable danger, and must be approached with respect and trepidation. Unless the physician has had considerable experience in the passage of sounds, he should restrict himself to the use of filiforms and followers which will obviate the possibility of severely traumatizing the urethra.

Those cases which prove refractory to the treatment as outlined should have a cystourethroscopic examination after a month's trial. Not infrequently, the cystoscopist will encounter a contracture of the vesical orifice, papillomas, cysts, polyps, granulation tissue or even neoplasms which require special therapy not available to the general practitioner.

POSTERIOR URETHRITIS AND CYSTITIS IN THE FEMALE

The single most common entity encountered in office urology is the problem of cystitis associated with posterior urethritis in the female. This condition may be encountered at any age, although it is more frequent in the post menopausal period. The onset of symptoms is frequently acute and often associated with gross rematuria. The frequency of urination with severe urgency, dysuria and tenesmus are most distressing so that prompt and effective treatment guarantee a grateful patient. Treatment of the acute phase consists of acidification or alkalinization of the urine dependent upon urinary p.h. and the administration of the sulfonamides or antibiotics based on the type of infection as determined by examination of a strained urinary sediment. Anti-

spasmodics are extremely helpful in allaying the distressing symptoms. Relief is generally prompt, although recurrences are common.

The patient who presents frequent recurrences of cystitis with evidence of infection should have a thorough urological examination inasmuch as the infection may be arising from the upper urinary tract and may be a harbinger of serious urologic disease. In the absence of upper urinary tract change, the focus of infection may lie in the genital tract or colon and measures should be instituted to eradicate such a focus.

The general practitioner encounters daily the female patient who has chronic "bladder trouble." Not infrequently she will complain of associated "nervousness" and attribute her bladder complaints to her "nerves." The urine in such cases may contain no leukocytes but will generally reveal numerous epithelial cells. Urine cultures frequently reveal no growth and careful examination of the urethral orifice reveals no caruncle, diverticulum or mucosal eversion. Treatment of this "posterior urethritis-trigonitis syndrome" consists of progressive dilatation of the urethra up to 35 to 40F. The patient should be advised that the condition is recurrent and that she should return promptly upon the reapperance of symptoms. The patient who has frequent recurrence of syptoms of bladder irritation, in the abscence of abnormal urinary findings, should be referred to the urologist so that the diagnosis of contracture of the vesical orifice or interstitial cystitis (Hunner's ulcer) may be ruled in or out.

PENILE LESIONS

The penis is an organ which each male must necessarily hold in his hand each day. For this reason, among others, penile lesions are generally brought to the family physician in an early stage. Unfortunately, the general practitioner commonly fails to recognize and treat or refer penile lesions. This indictment does not include venereal diseases.

Most deliveries are made by the general practitioner. Prompt examination of the infant will reveal the presence of hypospadias, pseudo-hermaphroditism or congenital stenosis of the urethral meatus. Early awareness by the parents of the nature of the congenital abnormality will result in early correction with attendant establishment of normal genito-urinary function and avoidance of severe psychological trauma.

Herpes progenitalis is a common lesion which manifests itself by the presence of a small group of vesicles on an inflammatory base and is accompanied by itching and burning. Treatment consists of keeping the lesions clean and dry by the use of a mild antiseptic powder and by circumcision for the recurrent cases where a long prepuce is present.

The middle-aged male occasionally presents himself with the complaint that the penis bends during an erection. This condition is known as plastic induration of the penis or Peyronie's Disease. The pathologic basis of this problem is the deposition of fibrous tissue plaques which occasionally become calcified, on the dorsal septum of the corpora cavernosa. The condition is often painful and frequently makes sexual intercourse impossible. A fairly high percentage of improvement may be obtained by the prolonged use of Vitamin E in doses of 200 I.U. daily.

For practical purposes, one can say that cancer of the penis never occurs in men circumcised in infancy. One needs no better excuse for the carrying out of routine circumcision in infancy. It is to be regretted that most cases of carcinoma of the penis which find their way to the urologic surgeon have had previous circumcision for the presenting lesion without identification of the neoplasm. The resulant delay with opportunity for metastases could be avoided by histologic examination of all unusual lesions of the penis. There is little excuse for failure to diagnose carcinoma of the penis in an early stage.

Stenosis of the external urethral meatus is a fairly common entity in both children and adults. The accompanying symptoms are those of obstruction and can be alleviated by simply meatotomy. In performing a meatotomy it is useful to insert a single suture at the lower angle of the incision in order to prevent union before epitheliazation occurs.

ABNORMALITIES WITHIN THE SCROTUM

The scrotal contents are readily palpable through the thin wall of the scrotum. Nevertheless, the diagnosis of intra-scrotal pathologic conditions may tax the physician's clinical acumen.

The differential diagnosis between epididymitis and torsion of the testis is of extreme importance inasmuch as the latter

calls for prompt surgical intervention. The differentiation can be usually made on the basis of epididymitis coming on gradually and generally having associated inflammatory reaction in the remainder of the seminal tract. Torsion has an acute onset and is not associated with a febrile response or inflammation in the seminal tract. In addition, in torsion, the epididymis and testis are pulled up toward the external inguinal ring and one can palpate an abnormal relationship between the opposite testis and epididymis. Where doubt exists as to the exact diagnosis, surgical exploration is indicated. If torsion exists, the opposite testis should be anchored to the scrotum.

Palpation of scrotal contents should be carried out bi-manually. Irregularities or enlargement of a testis call for early surgical exploration to eliminate neoplasm.

Cryptorchidism is associated with an increased incidence of testicular malignancy. Bilateral crytorchidism beyond puberty results in sterility. Pre-pubertal treatment is imperative and consists of one or two courses of pituitary gonadotropic hormones plus suction with a breast syringe at the external inguinal ring. Orchidopexy should be carried out before puberty when conservative treatment fails.

The presence of a painless indurated epididymis and a thickened, beaded vas deferens suggests the presence of genito-urinary tuberculosis and calls for prompt, thorough investigation of the genito-urinary tract for this disease.

SUMMARY

This paper has dealt with only a few common and relatively simple urologic problems. The urologist should serve as a consultant to the general practitioner in those cases which are obviously complex or refractory to the usual accepted mode of treatment. The best general practitioner is the one who manifests diagnostic acumen and not the one who refers the most patients to specialists.

FACE INJURIES*

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In the treatment of face injuries, one must, of course, start out with the emergency phase. When one is confronted with a face injury, it seems that it is best to first make an estimate of the damage that is done and then set out a plan for the care of that particular case. Only in this way can one hope to secure a satisfactory result, both to the patient and to the doctor. It goes without saying, that one who intends to treat face injuries should have some knowledge of the anatomy and the physiology involved and certainly be equipped with the minimum of tools for such work.

The examination of the case should be complete so that one is satisfied as to the extent of the injuries. Even though the injury may seem to be small or so-called minor, there may be something in the depth of the wound that is startling when it is uncovered. One should then make special examinations, such as x-ray, blood study, blood pressure, etc., and certainly, if possible, inquire as to the patient's susceptibility or idiosyncrasies to drugs, etc.

The repair of a face injury, ideally, of course, should be done in an operating room. One may do the work under local anesthesia or it may require general anesthesia. Of course, shock and hemorrhage must first be dealt with if it is present, the airway must be seen to, especially when edema is rapidly developing; and after a plan is made up, one may proceed with the care of the case. In this length of paper, the general principles can be hinted at but certainly a complete dissertation on face injuries cannot be carried out. One can operate on a great many of the patients suffering from these injuries under local anesthesia, especially the patients that are old enough to understand and answer questions. This holds true for a great many children. Regardless of what part of the face or what is involved, a few principals should not be overlooked.

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1. Complete hemostasis should be insisted upon in every instance. All bleeding points should be completely controlled before closure is begun.

2. If bone is exposed, it should be preserved. Any bony fragment that is attached and viable should be preserved for future restoration.

3. Debridement, therefore, is almost nil or extremely limited about the face structures.

4. When closure is begun after thorough cleansing of the parts with rapid and thorough flushing of sterile water or saline, each layer of the facial structures should be identified and closed with non-absorbable sutures preferably, especially in the early, clean wound. Then when the skin is reached, fine sutures of interrupted, non-absorbable material will afford the best result.

5. Ordinarily, no drain is used in the early, non-contaminated wounds.

6. Early removal of the sutures is essential to avoid marks from the sutures.

7. Pressure about the eyes and face in general is a good principle to employ if it is possible to secure. Sometimes, ice caps or ice can be applied to a part to lessen the swelling.

Occasionally, one cannot close a wound of the face because of some other injury, because of severe shock, or some other cause, so that the wound should be treated by hemostasis and a sterile dressing. Then, when the patient's condition warrants, the wound may be closed secondarily. To do this, the patient usually needs support by blood, antibiotics, debridement of the wound edges and closure. In this case, one may wish to employ a drain in each angle.

Often, in these cases, it is necessary to have the help of different doctors, for instance, the eye specialists, ear specialists, nose specialists, the dentist or maxilo-facial team.

In closing wounds about the face, it is well to follow the course of the crease-lines if possible. Sometimes this can be done by remembering that the crease-lines run in certain directions and to follow these in the closure of the wound. All foreign bodies must be removed; first, in behalf of the patient; and second, because of the legal aspect.

In compound fractures either from gunshot wounds or severe injuries, it is often indicated to have the aid of the dentist or some similar skilled person to assist in this type of injury. In our community, we rely a great deal on the oral surgeon where fractures of the jaw are present. Fractures of the nose and fractures about the jaw and face can often be reduced after a few days. It seems to me that some of the best results are obtained after the edema has lessened and the patient is restored to a good general condition and then carefully putting the parts together. This is especially true of the nose, fractures of the zygoma, and some fractures of the jaw.

Immediate skin cover may be done in cases thus saving time, preventing infection and a second procedure.

After the acute conditions are cared for, there remains a group of cases where a decision must be made as to whether to do anything about the scar, whether to replace a part that is lost, to improve contour, or to improve the conditions generally.

As a rule, all of these cases should have several months to quiet down and allow for absorption of the scar before any surgery is undertaken. In case of restoration of a part that requires a pedicle graft, the pedicle can be started at any time giving sufficient time for build-up of circulation and color. If the contour is not satisfactory, one must decide whether to use bone, cartilage, tantalum, or some other material for making up the defect. We use tantalum in cases about the orbit and about the jaw quite frequently. So far as contour is concerned, I get better results more consistently with the patient's own cancellous bone. While we do have a bone bank and have a good supply of bone, there is still some absorption, and sometimes absorption goes beyond what we hope for and the part has to be restored.

One of the good features of the old cases is that they can be fitted into the schedule, plenty of time can be allowed for development between operations, and the patient can have time to recover from surgery.

It goes without saying that any of the secondary operations must be done when the original wound has been cleared of infection or malignancy, when the patient's general condition is good, and if necessary, he may have time to get ready a supply of blood or to take whatever medicine is indicated.

LOCAL ANESTHESIA IN OBSTETRICS*

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The state of Minnesota has now had something more than two years of experience with a state wide maternal mortality study in great detail. There is every reason to believe that the Minnesota experience is repeated elsewhere. It is clear that obstetric anesthesia requires more practical attention than it has been given. It is almost as dangerous in Minnesota to the life of the mother as eclampsia when considered from the point of view of total deaths. Nothing is really known of its morbidities over a general population. The effects on the child have been studied almost entirely in such groups as well controlled clinics and little is really known of its effects in the broader field. There may be justification to fear that the fetal damage and destruction from maternal anesthesia is of distressingly frequent occurrence.

Much of the risk to the mother lies in two directions. With inhalation anesthesia, the problem is largely that of an almost inevitably badly surgically prepared patient when the anesthetic is used for delivery from below. The great risk to the mother under these circumstances is aspiration of vomitus. With conduction anesthesia, the difficulties which arise are usually not directly inherent in the method but are in the application of it. It is too often forgotten that the pregnant woman is intolerant of dosages of intra-thecal anesthetic drugs which will be withstood by the non-pregnant. Unskilled anesthetists overlook the significance of hyperbaric solutions. Too often, spinal and caudal anesthesia are looked upon as procedures which make skilled and continuous control of the patient unnecessary. The reverse is true.

From the baby's point of view, it is clear that for practical purposes no analgesic or anesthetic drug administered to the mother, with the exception of local anesthesia, is without risk. All who are doing obstetrics should familiarize themselves with the details of these drug effects. Snyder[1] has brought this information together in a useful monograph. Some of these effects are of a small order and most often require particular circumstances such as prematurity, traumatic delivery or the addition of general anesthesia to make them very evident. Others such as morphia carry a greater risk and are gradually being eliminated from use. But the risks are there and careless or routine administration will lead eventually to trouble. It should also be made clear that analgesic drugs in safe quantities such as Demerol and the barbiturates which are relatively well tolerated by the fetus, can produce serious depression in the baby when inhalation anesthetics such as ether are added. The effects of such combinations have escaped attention for too long.

At this point, it might be wise to make one strong statement. The quaint practice of anesthetizing, usually with open ether, the patient who appears to be about to deliver before the responsible physician arrives, has no justification. It carried lethal risks to both mother and baby which are intolerable. The same strong statement may be made in the baby's interests in regard to mechanical methods which are designed to prevent delivery for the same purpose.

This discussion is designed to apply primarily to a part of the whole obstetric analgesia and anesthesia problem to which too little attention is given. Those who do most of the talking and make most of the reports in this field are senior people working in completely equipped and completely staffed institutions. What may be reasonably safe and efficient in such circumstances may be impossible, unwise, unnecessary or unsafe in a less imposing milieu. Actually, it is under the latter circumstances that most of the obstetrical cases are being handled in this country. The desirability of safety and simplicity looms large here.

What are we trying to accomplish with obstetric analgesia and anesthesia? Complete relief of pain and complete safety for mother and child? Neither of these is obtainable in an imperfect world and it is evident that the combination can be mutually exclusive. The author is frankly conditioned as a teacher, a practitioner and an observer of such data as that obtained by the ma-

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ternal mortality study in Minnesota to lay primary emphasis on safety. Much too much damage has been thoughtlessly done to obstetric patients and their babies. Our efforts should be bent first of all to efficiently exclude from delivery from below, those patients who have such abnormalities as may be reasonably expected to produce pounding difficult labors. This may be a complicated and exacting task but it has great rewards. For the rest, one should aim at the spontaneous delivery of a child who not only breathes but cries at once. The mother should be conscious and cooperative throughout. She should be left in such a state that she can walk from the delivery room to her bed and move more or less freely about her room after a reasonable rest. Analgesia should be effective and above all, safe. And both of these should be designed to produce the conditions described above. With most patients, this can be accomplished.

This report is not primarily concerned with analgesia but a word might be said about it. The first part of the usual labor lasts in the primipara until four to five centimeters of cervical dilatation has been reached. The multipara will usually tolerate a centimeter more. During this time the usual patient needs the reassurance of an understanding and careful physician more than she needs drugs. Her problem is fear rather than pain. A careful examination on admission and an occasional visit during this time is more effective than drugs. From this point, the upper vagina begins to be distended and this is painful. An analgesic drug such Demerol, given only in doses which will make the discomfort tolerable to the individual patient, is usually sufficient and is safe, particularly if inhalation anesthesia is not to be given later. By the time the cervix has reached eight or nine centimeters dilatation, something more is usually required. It is our practice to move the patient to the delivery room at this time for one of two procedures. Fifty per cent nitrous oxide and oxygen as an analgesic may be given in doses of a half dozen deep breaths just as the contraction is starting. This is the method of choice for those patients who appear to be proceeding rapidly in labor. For the primipara who is moving more slowly, paracervical block as described by Rosenfeld,[2] Gillam[3] and Freeman[4] has been effective for about 90 minutes and as far as can be determined, completely safe.

For the paracervical block, two spinal needles are used. These are of such bore that one will fit through the other. The needle with the larger bore is cut to a length which will allow the smaller needle which fits through it to protrude 1.5 centimeters beyond its end. Under sterile precautions, the vagina is irrigated with 1-1000 aqueous zephiran. The larger bore needle is then introduced with the fingers which carry the end ordinarily attached to a syringe, up to a point just lateral to the junction of the cervix and vagina. This serves as a guide through which the smaller needle attached to the syringe is introduced. It can only protrude for 1.5 centimeters. After being sure that the needle point is not in a vessel, 10 to 20 cubic centimeters of the anesthetic agent is injected. This is repeated on the opposite side. About five cubic centimeters of solution is injected into the area of each utero-sacral ligament. One per cent Procaine and one and one-half per cent Metycaine have been used, usually with the addition of two minums of 1-1000 adrenalin to each 30 cubic centimeters of solution. A newer drug, Xylocaine, is now being tried and appears to be effective over a longer time than the others. This is not a complicated procedure and this department has seen no untoward either immediate or remote effects. Care must only be taken to so control the needle point with the finger that there is no possibility of puncturing the head of the fetus.

At eight to nine centimeters dilatation in the progressing multipara and at full dilatation in the primipara, pudenal block is almost routinely carried out. One per cent procaine is used and to this is added one or two minims of 1-1000 adrenalin per 30 cubic centimeters of solution. Adrenalin is not used in any circumstances in the presence of hypertensixe toxemia of pregnancy, hyperthyroidism or hyperfunctional disease of the adrenal medulla. It is best avoided in the presence of rheumatic heart disease more serious than functional class one and in all patients with congenital heart disease. The injection of adrenalin automatically rules out the use of Cyclopropane. Indeed, it is the opinion of this department that Cyclopropane should never be used in the patient who has not been prepared with barbiturates.

There is nothing complicated about the techniques of pudendal block. After the usual preparation and draping for delivery, the vagina is irrigated with 1-1000 aqueous

zephrian. Care must be taken not to mistake the aqueous zephiran for the procaine solution. A small wheal is raised in and below the skin just medial to each ischial tuberosity and on the perineal body. About five cubic centimeters of solution is injected to catch the perineal branches of the pudendal nerves where they emerge from behind the tuberosities of the ischia. The solution is then injected to produce a field block of the posterior two-thirds of the vagina. About five cubic centimeters is distributed to each levator muscle. Another five cubic centimeters is injected well up laterally in each vaginal wall at the level of the ischial spines. All of this injection is controlled for position by a finger in the vagina. The area where episiotomy may be carried out is particularly widely and well infiltrated. The anesthesia from this will be effective for at least 90 minutes and often longer.

This anesthesia will obviate any significant discomfort from the lower two-thirds of the vagina. The discomfort of the last part of the second stage is obviated and it is possible to have most patients deliver quietly and slowly between contractions by voluntary effort. They will not know that an episiotomy is being done and it can be repaired without any discomfort. With gentleness, low forceps can be used. Breech extraction is facilitated since the levator muscles are flaccid and since it is possible to so time the delivery of the breech that the uterine contractions can be made to coincide with delivery of the head into the pelvis. Forceps to the after-coming head can be comfortably applied if it is done gently. Voluntary effort from the patient is available as an aid.

Some thousands of such infiltrations have been done by the department for delivery, cesarean section and for gynecologic surgery. There has as yet been no evidence of any untoward effect from the Procaine. An occasional patient is abnormally sensitive to adrenalin. This will be evidenced by transient rises in blood pressure, a transient pounding or sense of fullness in the head and occasionally, the contractions of the laboring uterus will stop for 10 to 20 minutes. None of these are cause for alarm. There is no evidence of an undesirable effect on the fetus. There are no disasters such as can occur with most of the other anesthetic agents. The worst that can happen is that the inexperienced person will get incomplete pain relief until he has mastered the simple maneuvers involved.

For more complicated deliveries, other forms of anesthetics may be required. These are infrequent and each presents its own indications. It would carry this discussion too far afield to consider these in detail. The symposium as reported in the *Journal of the American Medical Association*[5] might well be consulted in this regard.

The same general principles which were applied to normal delivery from below apply to cesarean section. Already within this year, there are two cesarean section deaths in Minnesota attributed to the anesthesia used. There need be no concern with the anesthetic choices made in critical, well equipped institutions. For the broader field, local anesthesia offers a superior and completely safe anesthetic. It has been said[5] that local anesthetic does not offer sufficient control of discomfort or sufficient relaxation. That is simply not true. The author has used no other anesthetic for cesarean section for nearly 20 years. And this applies to cervical and extraperitoneal sections, to accompanying tubal sterilizations and to those radical sections where it is indicated. It is not completely without discomfort. No anesthesia is without some undesirable feature. There is no evidence that local anesthesia has yet destroyed a patient or damaged a fetus at cesarean section. There is no other anesthetic for which as much can be said.

A variety of techniques have been reported. The author's own is described simply because it has functioned satisfactorily in his hands. Premedication is usually made up of six grains of Sodium Amytal or an equivalent amount of another barbiturate given three hours before operation. Scopolamine grs. 1/150 or 1/200 is given when the patient leaves the ward for the operating room. One-half per cent Procaine is used with Adrenalin added as described above. The line of incision is infiltrated with a generous quantity. This is flared out at the symphysis pubis and carried down over the pubis so as to be well beyond the bottom of the incision. At four centimeter intervals, the needle is introduced at right angles to just beneath the fascia and about three cubic centimeters of the solution is injected at each point. A field block is then produced on both sides following the lateral margins of the rectus muscles. Solution is injected

just below the anterior rectus sheath in the same way as was done at the line of incision. As the incision is made, solution is injected again beneath the rectus sheath and into the peritoneum itself. Great care is taken to flare this out at each level at the symphysis. For the standard cervical cesarean section about five cubic centimeters of solution is injected beneath the utero-vesical reflection and is massaged laterally with the finger. About three cubic centimeters of solution is injected into the broad ligament at the tubo-uterine junctions for tubal sterilization. For radical cesarean section, infiltration of the ovarian ligaments and of the parametria adjacent to the lower level of incision is added. Extra peritoneal section can be done with only the abdominal wall infiltration but it is preferred to inject the lines of fascial separation over the bladder. This helps with the necessary dissection.

Gentleness in the handling of tissues is essential in work within the abdomen under local anesthesia and to a lesser extent elsewhere. This is a desirable situation under any conditions. Under local anesthesia, the patient will enforce it.

These then are disciplines which will on their application, add to the safety of mother and baby. They are recommended for that reason.

BIBLIOGRAPHY

1. Snyder, F. F., Obstetric Analgesia and Anesthesia. W. B. Saunders Co., Philadelphia. 1949.
2. Rosenfeld, Samuel S., Am. J. Obstet. and Gynec. 50:527. 1945.
3. Gillam, J. S., and Freeman, D. W. Journal-Lancet. 70:206. 1950.
4. Freeman, D. W. Bulletin of the University of Minnesota Hospitals. 22:4. 1950.
5. Symposium. J.A.M.A. 145:15:1111. 1951.

RECENT ADVANCES IN THE DIAGNOSIS AND TREATMENT OF CANCER*

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In establishing surgical principles for the treatment of cancer of the colon and rectum, Maes and Essrig[1] list as the first two, early diagnosis and radical operation. Assiduous attention to these two principles have produced the greatest advances in the treatment of cancer and until surgery is completely replaced, these two principles will form the basis of most rational approaches to the problem.

In a search for methods of early detection of cancer, human ingenuity and perseverance have perhaps been the greatest contributing factors. Newer skills and techniques have continued to open and explore avenues of diagnostic significance. A better understanding of malignancy on the part of individual physicians and adeptness in the recognition of cancer has led to an earlier diagnosis in countless cases. Pertinent histories and systematic physical examinations will continue the trend. This is significant when one considers that most carcinomas of the breast are palpable before they metastasize to the axilla, and that 75 per cent of carcinomas of the rectum can be felt by the examining finger.

Laboratory examinations are important aids. A physician with a high index of suspicion of malignancy is cautioned to look further into an unexplained anemia and to investigate a low gastric acidity. Great strides have also been made by the roentgenologist. With newer skills and techniques they are able to place the site of a peptic ulcer on either side of the pyloric ring. This is significant when one considers that from 12 to 15 per cent of gastric ulcers are malignant. With barium enemas and contrast techniques they are able to examine the entire length of the colon and by encouraging barium to pass the ilio-cecal valve, they are able to differentiate a carcinoma of the right colon from terminal ileitis.

Endoscopy has made an important contribution to the early diagnosis of cancer. Already reports are appearing in the literature of biopsy specimens of gastric mucosa taken through a gastroscope. The importance of biopsies has long been recognized but the inaccessible nature of some portions of the body have presented the removal of

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adequate tissue specimens. These difficulties are gradually being overcome by better methods of endoscopy.

Of great significance are the cytology examinations. The examination of cytology smears taken from the vagina and cervix are now so reliable that false negatives and false positives are below 10 per cent. In many cases, cytologic examinations disclose the presence of carcinoma of the cervix when biopsies are negative and only later confirm the cytologic study. Cytologic examination of bronchial secretions either from the sputum or aspirations of the bronchial tree are positive in 50 per cent of the cases of carcinoma of the lung. Special stains which are now replacing the Papanicolaou stain and the increasing abilities of the cytologists are responsible for these improvements. Tracer studies with radio-active iodine have been used to discover metastatic sites of carcinoma of the thyroid. In future years radioactive isotopes may be used to detect metastases in any malignancy.

When all of the methods of examination have been exhausted, surgical exploration may be the resort. Even this, by virtue of the antibiotics and blood transfusions has been made less hazardous in recent years.

In the surgical treatment of cancer the recent advances have been those of a radical nature. In many cases today, not only are attempts made to remove all of the lateral extent of a malignant lesion but also to remove the adjacent sites of metastasis. The consistently better prognosis of cancer of the colon over that of the left colon is an example of the effectiveness of more radical surgery. The treatment of cancer by wide excision is not a new principle. Certain aspects are perhaps of recent origin. These considerations include changes in the concepts of operability and inoperability and the evaluation of all factors involved. These concepts are being adjusted and corrected by surgical experience. Thirty years ago the removal of a lung or pancreas for malignancy would have been considered foolhardy. Now such operations are not considered fantastic at all, and many radical procedures have produced remarkedly gratifying results.

Lesions heretofore considered inoperable have been subjected to surgical approaches and five years survival have been noted in many cases. In general, the five years survival rates for cancers amenable to surgical excision have been increased. Admittedly in some cases, the increase has been slight. Apart from the five year survival rates, there is the surgery of palliation. Wide excision is being employed more and more for palliation. Where a shunting operation was once considered the procedure of choice in a patient who had an obstructive lesion of the gastro-intestinal tract with metastases to the liver, wide local excision is being performed. Examples are colectomies and gastrectomies in the presence of inexcessible lymph nodes metastases and small metastatic lesions of the liver. Resections in many cases are now considered more likely to insure the patient of a more comfortable and longer existence.

In evaluating the results of radical surgery, it must be emphasized that exhaustive and correct studies are difficult to make and that in most fields the surgeon who undertakes to perform radical procedures must rely upon his own judgment and integrity. Cancer surgery is both a challenge to the surgeon and to the patient. It requires courage on the part of the patient and the physician. There is however, a limit to this philisophy. The contemplation of surgical procedures of a radical nature without the evaluation of facts and a favorable opportunity for the patient's survival and comfort will lead to poor results and justifiable criticism. Mistakes will be made, but the limits of radical surgical procedures will become increasingly well defined. The concepts of operability will be altered permanently but to say that they will be definitely established is to discount the probabilities of future progress. Prognostication in patients with advance cancer is extremely difficult. Rules upon which to base decisions are hard to formulate. Nevertheless, for the surgeon who takes the position that everything possible be done for the prolonged duration of the life of an individual with an advanced maligancy, the possibilities of radical surgery for advanced malignancy must be considered.

Brunschwig[2] states that it is uncommon to encounter a patient who wishes to die no matter how pitiful his plight may appear to the objective observer. Most patients seek a ray of hope, and for the doctor who wishes to help them, radical measures offer some chance of success.

BIBLIOGRAPHY

1. Maes, V., and Essrig, I. M.: Some Reflections On Surgical Principles In Treating Cancer of the Colon and Rectum. Ann. Surg. 130: 100B (Dec.) 1949.
2. Brunschwig, A.: Extended Surgery In Advanced Cancer. Ann Surg. 133: 574 (April) 1951.

THERAPEUTIC CONFERENCE*

The University of Oklahoma School of Medicine

SURGERY OF THE HAND

DON H. O'DONOGHUE, M.D., RAY L. LINDSAY, M.D., AND
JESS D. HERRMANN, M.D.

DOCTOR O'DONOGHUE: Gentlemen, this afternoon our topic for discussion is concerned with injuries to the hand and upper extremity. Our panel today includes Doctor Ray Lindsay of Pauls Valley, Oklahoma, Doctor Herrmann and myself. I don't know how much contact you gentlemen have had with hand injuries but certainly in my experience it is one of the most neglected fields of medicine. Hand injuries may be severely disabling. For example, one stiff finger may be worse for a person than if he had lost his whole foot, if his particular occupation requires extensive use of the hand. I feel very fortunate that we have with us today Doctor Lindsay, who has had a great deal of experience in hand injuries and I would like to call on him at this time to make any remarks that he may feel are pertinent to introduce the subject.

DOCTOR LINDSAY: Gentlemen, I would like to particularly emphasize for you this afternoon the importance of hand injuries. The person who passes the plate at the church or the lady who takes your money at the picture show may happen to have been a patient of yours at sometime, so don't be embarrassed by a finger that cannot be flexed or hand that is numb because of some nerve that you left unsutured during the golden hours when you were treating the injury. Let's consider for a moment a few fundamental principles in treatment of hand injuries. The first thing that you must do, and you must keep it in mind all the time in your original assay of the wound, is to keep it clean and not add to the contamination by an open mouth, breathing, or as Doctor Koch has aptly said, "spitting in the wound." Naturally in any severe injury of the hand or any other part of the body the entire patient must be considered, as you well know. Hemorrhage and shock are frequently present to some degree and they may be of very great degree. When you see this original injury look quickly with a mask over your face, cover that wound and often without looking at it again you may get a very good estimation of the degree and the extent of that injury while this patient is being treated otherwise for shock.

In the diagnosis of the extent of the injury a fundamental knowledge of the anatomy involved is absolutely essential. I would advise you before you start practicing, in your residencies, in your internships, tonight even, to review and constantly review the anatomy of the structures of the hand. This is such an intimately connected set of bones and ligaments and tendons and nerves, that to deny function of one will in time alter the function of the entire hand. In assaying the extent of the injury, correlating the location of the wound with your anatomical knowledge of the possible structures involved, will give you a pretty good idea of the structures most likely to be injured.

If the injury is at the wrist naturally the first things that you think of are tendons and nerves, the blood vessels will be obvious if there is a serious bleeding. If the hand is injured anywhere on the palmar surface, the tendons are again considered primarily. Adjacent to the tendons and on the volar surface of each flexor tendon of the palm are digital nerves, which Doctor Herrmann will very likely bring up. Remembering your anatomy will recall to mind that the digital nerve lies to the volar side of the veins and arteries and hence is likely to be the first thing that the knife will hit in your incision. In your diagnosis of the injury there are a few points about the pin-prick test for nerve sensation that I should like to emphasize. In the traumatized hand be very careful about deciding that this nerve is cut because there is a numbness of trauma, that frequently will hide the numbness of a cut

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nerve. Sometimes this will continue for a long period of time maybe as long as six hours, so you must be very careful and very accurate in your pin-prick sensation test of that particular nerve branch.

In testing for nerve function, if your injury is above the wrist, always remember to have them abduct their fingers and adduct their fingers; test the lumbricales by flexion of the entire finger with the digits straight; test apposition of thumb to fingers; test the flexors, the short flexor of the thumb particularly, if the injury is at the wrist, because the motor branch of the median is the only motor nerve of any diagnostic significance in the traumatized hand. If you have decided surgery is necessary, remember an advice that Doctor Koch used to give that came from Doctor Kanavel, "don't operate on a man or rush him to surgery if he has a fast pulse and a cold nose," that would seem to be rather ambiguous for hand surgery and yet the severe associated trauma that you will find in some of your patients with hand injuries should make you cautious, remembering your patient as a whole, always. In the care of the wound let us assume that we have the patient in surgery. Don't further contaminate a wound that is already dirty, wear masks, caps and gowns and gloves and remember in your surgery of the hand, repair it under general anesthesia. There are very few places in the hand that definitive surgery or repair in surgery can be done under local anesthesia or regional block. The general anesthetic with the blood pressure cuff and a bloodless field are of paramount importance in surgery of the hand.

You now have your patient anesthetized and you are ready to begin definitive care of the wound. Scrub this hand with adequate amounts of soap and water and don't watch the clock, scrub it until it is clean, washing out all debris. If you need to use benzene on the skin for grease it is perfectly all right, but keep it out of the wound. Irrigate the wound with copious amounts of soapy water, wash out the soap with saline and then stop and in this bloodless field look carefully at every structure that is injured. You know the anatomy involved. Let's start from the surface in evaluating the various structures. You know from the way that this injury occurred that this man had crushing trauma. In crushing trauma you should be very careful about deciding whether the traumatized skin is viable or not. Skin as far back as ⅛ of an inch from the wound may be so traumatized and so ischemic that it will have to be removed. It should be obvious to you that you will be better able to make this decision after you have cleased the wound. Check further into the wound for loose particles, removing any that are present. Now look for any nerves that may be within the field of your operation. If you suspect from the pin-prick test that you have a nerve injury, now is the only time that this patient is going to have it repaired for the most successful results. Remove all loose tags of pale non-contractile muscle, nonviable fascia. In short make it as nearly clean as circumstances will permit.

DOCTOR O'DONOGHUE: Thank you Doctor Lindsay, I think that introduces many of the problems that one faces in dealing with injuries to the hand. I would like to call on Doctor Herrmann now to discuss some of the neurosurgical aspects of hand injuries.

DOCTOR HERRMANN: Too often, I think, when I am talking before the student body I have the feeling that they have the impression that if you have a neurosurgical lesion one should simply put the patient in the ambulance and send them to Oklahoma City where we can look after them. This is not true of course and in injuries of the hand with neurological lesions, the neurosurgeon is certainly not the man to care for the wound. In fact, as Doctor Lindsay has said, the man that undertakes the repair of the hand must take full responsibility for the entire procedure. There are few additional points that I might add that will help you in your analysis of the extent of the neurological injury to the hand. As Doctor Lindsay has said, sensory function particularly of the digital nerves is best checked with the pin-prick test. The motor functions of the three major nerves involved however are best evaluated by the three following tests which can be quite helpful. For the Ulnar nerve, see if they can adduct their fingers and see if they can place the little finger on top of the ring finger. That is impossible if the ulnar nerve is gone. With a radial nerve that is cut low you won't have a wrist drop, in fact you won't have a wrist drop if this is cut up high because the long extensor tendons are going to elevate the wrist, but if they can extend the thumb then you are pretty sure that you do not have your radial nerve cut. For the median nerve motor function is best

tested by simply seeing if the patient can cup his hand. This of course tests the motor branch of the median nerve to the Opponens Pollicis. These are not a 100 per cent true proof tests but they are certainly good practical tests that are worthwhile remembering.

A few words about the definitive care of severed nerves at this time might be appropriate. Remember that the man that sees the nerve injury first has the golden opportunity for best results. When one has to go in later in an attempt to suture a severed nerve there is so much scar tissue and so much disruption of normal relationships that many times when a wound is healed we simply advise against further surgery of the hand. We do this because if there is considerable scar present the chance of finding these small nerve endings without creating more trauma that would disable the hand more than in the first place, is very small. Frequently in these secondary repairs there is such a further loss of sensory function that it outweighs any benefit that could be received. Now as to the problem of suturing these small nerves, remember that from a practical standpoint it takes little more than simple apposition of these tiny nerve fibers to get them to grow. Remember however, that we must do this in a bloodless field so that a blood clot will not form between the two ends and make nonconductable material between them. For suture material, we prefer split silk. Tantulum wire is fine but frequently it is difficult to see or to handle, so I prefer black silk. Let me emphasize again that in the very very small nerve simple apposition of the nerve fiber endings is adequate. When the end of your nerve is as large as a kitchen match, then you can probably put in two or three sutures through the epineurium but don't put your sutures through the substance of the nerve itself.

There are several other factors that one must remember. These factors should lend emphasis to our statements that one should if at all possible attempt primary suture of the nerves at the time of injury. First, remember that a cut nerve or a divided nerve will retract after the injury. Two, a neuroma may grow on the ends of each of these and then later when it is time to do your nerve repair you may have to sacrifice at times up to a half inch or so of each end from the nerve, which then brings up the additional problem of getting additional length of the nerve. This all serves to emphasize the point that the man who sees the original wound should take a lot more time to be sure that all the nerves that have been involved are in apposition.

DOCTOR O'DONOGHUE: Doctor Herrmann, how about the situation where there is a great deal of contamination of the wound and primary closure of the wound at this time will almost certainly result in severe infection. It has been said that sometimes in tendon repairs it might be just as well to let the wound heal and to go in later and attempt definitive repair.

DOCTOR HERRMANN: We encountered this situation during the last war. Particularly in deep wounds where there was envolvement of nerve and gross contamination. In these circumstances the nerves were sutured bringing the severed nerve endings in apposition the wound was then just lightly closed about it. Our experience in this situation was that the nerve would take and that later secondary definitive repair for closure of skin and structures was very successful.

DOCTOR LINDSAY: As a member of the same hospital unit with Doctor Herrmann during the war, in some of these extremity wounds we would often pull a sciatic nerve together knowing that we had a contaminated wound, and later definitive repair certainly was made much easier because the nerve injury had already been repaired.

A word now about contaminated wounds. This is true whether it is on the scalp, face, back of the neck, upper thigh or the hand. We have as much of a bloodless field as is possible. We have removed all foreign body and the pale ischemic muscle bundles, the loose fibrous tags have been carefully dissected away and then the question comes up and it will come up in the future, "when may I close this wound?" Remember this, that in compound wounds generally speaking among hand surgeons like Koch, Bunnell and Kanavel if you can get the wound within the first six hours and you feel that you have dealt adequately with the contaminant everything is favorable for closure. So, after you have sutured the nerves and tendons and the wound is ready for closure remove the tourniquet, ligate all spurting bleeders by using the finest silk or cat-gut to maintain a continued bloodless field. Then close the wound with the finest possible sutures. The hand and the extremity should then be splinted in a favorable position.

This brings up an additional problem in which at times we may have to compromise either the favorable position for healing of the tendon or the favorable position for the compound fracture. We will ask Doctor O'Donoghue to settle that for us in a minute. A word now on suturing of tendons. Remember that the tendon is a peculiar structure and on the back of the hand where there is a very thin sheath, if this tendon if left unsutured it is going to spread out in every direction and end up in a fiberous mat that will stay that way. So suture of the tendon is certainly important. I should also like to emphasize certain things you should remember about the sequence of events when a tendon is sutured. In the first week there is a reaction from the sheath which puts out loosely connected collagen fibers among blood cells and unorganized material. The second week this process continued until a rather large fusiform swelling is formed. Beginning in the third week is a proliferation phase of tendon cell regeneration and lessening of reaction around the sheath. During the fourth week tendon cell proliferation continues, sheath reaction subsides and lessens to allow motion. Only after the 21st day is there enough strength in the union to allow limited motion. Remember this process and time of healing and tendon repair will have a better chance of success.

DOCTOR O'DONOGHUE: Let's spend a moment now considering the Orthopedic aspects of injuries to the hand. If you have a wide-open laceration it isn't a good idea to use a lot of internal fixation on the bones. You can, and we do sometimes use plates in the presence of compound fractures but it should be avoided if at all possible. The newer method of using intramedullary fixation works in hand as well as elsewhere. One can pass Kirschner wires down the fingers, down the metacarpals, down the carpal bones and preserve some sort of normal shaped structure for the tendon and nerve repair. When applying the splint, if possible place the fingers in a relaxed position of moderate flexion. They should neither be completely flexed nor completely extended. I think that this is probably the most common mistake that is made in the hand, that is, splinting the fingers in complete extension. The hand becomes completely worthless if one has the misfortune of getting fixation or stiffness in that position, and it is very easy for them to become immobile in that position. If a hand has been placed in flexion and stiffness results it is possible to extend them later. But a hand that has been left in extension develops fibrous bands around the sides of the ligaments and joint capsule which fixes the fingers in extension and forever prevents the possibility of flexion of these fingers. The ideal position is Mason's position of function, that is with about as much flexion as you would get if the hand were placed over a moderate sized headroll. In this position there can be apposition of the thumb and fingers if stiffness does develop.

As Doctor Lindsay has mentioned, frequently multiple injuries are sustained at the time of injury to the hand. In this instance a question of priority develops, that is, which injury should be treated first. The only answer to that problem is—that any time that you have an injury either single or multiple you have to make up your mind as to the best thing to do for each particular condition and then decide which condition should be treated first. You may, for example, have a patient that is in bad condition as far as his general outlook is concerned—in a state of shock with multiple injuries — and you may feel that you shouldn't do much at the time because of his poor general condition. Yet, during that lost time you may be losing the golden hour that Doctor Lindsay has mentioned, during which you have your best opportunity to repair the serious injuries of the hand. In the last analysis it is a matter of your clinical judgment as to what injury has priority. Your judgment is based on your experience. If you make a decision and it turns out wrong there isn't much you can do about it except add it up to experience and this experience will then influence your later judgment.

STUDENT QUESTION: Doctor Lindsay, how does one decide whether amputation is necessary or not in injuries of the hand?

DOCTOR LINDSAY: In trauma to the hand where the consideration comes up for amputation let me first mention this point. The debridement of a contaminated wound in the hand like in the face should be as limited as you can possibly make it. Remove the actual traumatized ischemic tissues, of course. If a finger or fingers in the hand look like they have lost their viability, and certainly I don't think its always possible to decide at the operating table that this is a non-viable digit, it ought to come off. If it is badly contaminated and there is a com-

pound fracture through the joint—through the distal joint, and you can tell from the paleness after you have washed this digit, there is no blood response, no color response to this tissue at all, it is apparently nonviable, then I think you would be certainly justified in amputating that finger back to viable tissue leaving every bit of tissue that can possibly be saved. In other words, be as conservative as possible. If there is a question in your mind of viability and you have done the other definitive measures that we have mentioned, then put this hand with a fluff dressing in a position function opposing the little finger towards the thumb like Doctor O'Donoghue said, the digits relaxed in partial flexion so that your collateral ligaments will be under slight tension. Bind the hand with a snug elastic bandage and then wait and observe the patient. It is always possible to go in and do further amputation later. The question of inadequate circulation because of reflex vasospasm enters in here. I should like to ask Doctor Herrmann for comments about Stellate ganglion block in this situation in an effort to improve circulation in the affected extremity.

DOCTOR HERRMANN: In any traumatic injury there is frequently considerable vasospasm associated with actual damage to the blood vessel. It is much the same as if you have an embolism. Distal to the embolus you are getting no blood supply at all, but proximal to the embolus you have spasm of the blood vessel which is decreasing the blood flow considerably. There is an article written, I believe, in 1945 by Doctor Murphy in the *Annals of Surgery*, describing a very simple method of stellate ganglion block. It is done at the level of the cricoid cartilage at the mid-point of the clavicle. You simply enter with your needle hit the sixth vertebral body and stop when you strike bone. You don't go through any vital structure although I would advise you to look up your anatomy on this point. The procedure is fairly simple. During the war Doctor Murphy reportedly did this procedure frequently using an ordinary spinal needle. Untrained persons did them and in spite of the difficulties they produced a Horner's syndrome in 95 per cent of the cases which indicated block of the stellate ganglion. So, you can see if one gets 95 out of a 100 good results from untrained personnel that the procedure is actually relatively simple.

The effect that you should get on a normal extremity or one in which there is a marked element of vasospasm is: 1) dilation of the veins of the hands that you can see. 2) Marked increase in warmth of the hand. 3) The skin warm and dry. There are also other side effects—the pupil becomes small, there is relative enophthalmos and a narrowing of the palpebral fissure. This procedure can be repeated as often as necessary, and I think that it saves a great number of hands. The marked increase in blood supply to the affected extremity improves the chances of healing in the affected extremity. There has been one death recently reported in the *Journal of American Medical Association* from this procedure. However, since so many of them have been done and only one death, it is a relatively safe procedure. Use about 10 cc. of a two per cent novocain solution. The same procedure can be done for the foot and lower extremity using a lumbar symphatic block.

DOCTOR O'DONOGHUE: I am happy that you have mentioned this point Doctor Herrmann. The problem of causalgia, reflex sympathetic dystrophy, persistent vasospasm, that occasionally develops following trauma to an extremity is a very troublesome problem. Frequently it follows a simple Colle's fracture or a sprained wrist. The x-rays show excellent healing of the bone and you can't understand why the hand is cold and clammy, why the patients complain of pain and why they can't use their fingers. In our experience stellete ganglion block in this circumstance may provide marvelous results. Frequently the block has to be repeated but on many occasions a single stellate ganglion block will completely relieve all symptoms.

We can't hope to cover all the aspects of injuries to the hand in our discussion today, there are a few additional points that I should like to bring out at this time. First, I should like to repeat Doctor Lindsay's word of warning about the hand. You can't be casual in any injury of the hand. It is so easy to overlook serious injuries to the hand. I frequently have had the experience of people coming to my office with a hand that is entirely numb with nerves or tendons obviously gone. The usual story is that a few weeks or months before, he had sustained a superficial laceration of the hand, gone to a hospital emergency room and somebody sewed up the skin. Then in the following month or so the severe symptoms developed. When a patient comes to you in that condition it is a difficult problem and a certain

amount of permanent disability is almost sure to result. Remember that if you get a laceration of the palmar side of the hand, fingers are usually flexed at the time of injury, and the flexor tendons are usually tight across the joints. The slightest nick in the skin by a sharp pointed knife may cut the tendon half-way or two-thirds across and not be apparent to a doctor who just casually examines the injury. When you have the patient move his fingers it is impartant to notice whether the finger tips move or not! The profundus tendon may be completely servered through a relatively small incision. The best way to avoid mistakes of this sort is to have the patient put the hand through a complete range of motion and carefully observe this. Broken fingers which seem to be a relatively minor accident frequently result in severe disability. Your patients will be grateful to you for good results and very unhappy about poor results. So you should be extremely cautious when treating simple fractures of the finger.

Let this then serve as a word of warning to you all, particularly when you are residents and interns for that is the time when you will see most of this sort of injury. Don't be in a rush in the middle of the night and simply sew up a laceration of the skin of the hand, only to be embarrassed some weeks or months later to find that you have sewed the skin over a lacerated tendon or nerve. Doctor Lindsay, do you have anything further to add to injuries of the hand?

DOCTOR LINDSAY: Yes, there is one other hand injury about which I would like to say a few words. That is, burns of the hands as wounds. Any burn of the hand beyond a blister I think is a major injury. I would like to mention a few points pertinent to the treatment of this sort of injury. I think that it is probably unnecessary to repeat at this time the steps in the primary treatment of burns as wounds, other than being sure that the wound is adequately cleaned as in other wounds, working under sterile technique and treating the patient as a whole. Our best results have been obtained with plain vaseline gauze which we believe to be the simplest burn dressing. The point that I should like to emphasize however, concerns the deep second and third degree burns of the hand. If you are going to assume the responsibility of treating this wounded hand you should never allow that burn to heal by granulation. Clean granulation tissue on the back of the hand will look pretty and it may look to you as though this second degree burn would heal without scar. However, that isn't what happens. It leads to the most severe scar formation and believe me is an embarrassing object when it is sticking through the picture show window handing you change. Don't allow it to granulate. When the patient comes back for the first dressing, say seven to 10 days after your first definitive treatment, is the time for you to attack the granulation tissue. At the time of the first dressing you must be prepared to do a skin graft. A split thickness graft at this time over healthy granulation tissue will greatly reduce the amount of scar tissue that tends to develop. Healing will be very kind and you will avoid a lot of criticism.

DOCTOR O'DONOGHUE: Are there any further questions? The limitations of time prevent a complete discussion of all phases of this problem. I hope however, that we have been able to point out for you the importance of hand injuries and it is our mutual hope that what has been said here today will be of help to you in the future when faced with problems of this kind.

HAVE YOU MADE HOTEL RESERVATIONS

1952 Annual Meeting of the Oklahoma State Medical Association

Municipal Auditorium Oklahoma City May 19, 20, 21

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ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

President's Page

We wonder how many members of the Oklahoma State Medical Association have read the ads and the articles in the *Journal of the American Medical Association* regarding the American Medical Education Foundation. The Foundation was formed to afford financial support to medical schools, many of which are in dire need of funds. It seeks to provide private, rather than government funds sufficient to enable medical schools to continue to train an increasing number of doctors of medicine. It was formed in an effort to avoid subsidization and consequent control by the Federal government.

Individual members of the A.M.A. have been asked repeatedly to give money to the Foundation. The response from individual members over the country has been extremely small. The response from individual members in Oklahoma has been extremely small also.

A representative of the Oklahoma State Medical Association has been asked to attend a meeting in Chicago the middle of February to discuss an intensive campaign to persuade individual doctors to support this Foundation with cash money. How can he represent the doctors of Oklahoma if he does not know what they think?

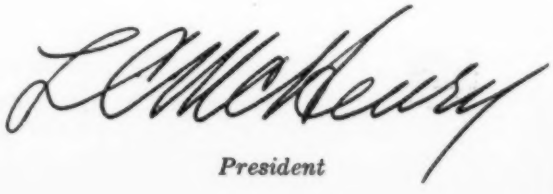
Will you write to me, your president, now, and tell me some things? If you think the Foundation is fine and worthy, why have you not supported it to some degree at least? If you think the whole idea is foolish and the medical school might as well get on the government dole, please say so. If you think that organized medicine should stop trying to defeat those who are promoting socialization through some sort of socialized medicine and simply bow its head and await its fate, why not tell me that? If you feel that the contribution of one million dollars, already made by the A.M.A., taken from our dues of 25, is enough for the time being so far as doctors are concerned, tell me that. If you think that our own brass hats in Chicago jumped the gun so far as individual A.M.A. members are concerned in forming the Foundation in the first place, say so?

If you have a better idea as to how to fiight against federal control of medical education, for goodness sake let's have it. If you think government support and control of medical schools would be satisfactory, say so.

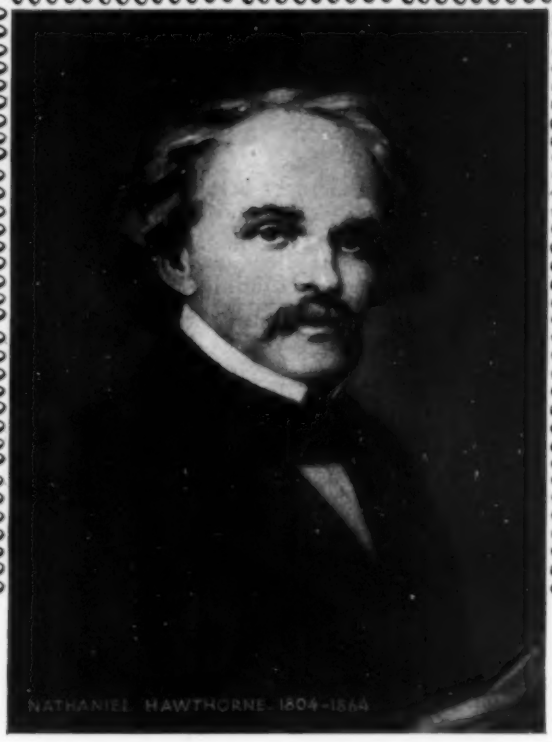
Maybe our Chicago officials have not been able to find out what 140,000 individual doctors think about this and a lot of other things. Your own president, so far has not been able to find out what 1,300 doctors think about a number of serious matters that have been mentioned on this page. How can he find out if not more than four or five members care enough about these matters to write a letter and tell him?

If a letter takes too much time and effort of the busy doctor just get on the phone and tell your Councilor. He and the other Councilors are going to have to instruct your representative who is going to this Chicago meeting so that he may correctly represent your thinking for the edification of our Chicago officials and representatives of the other states.

Come on, break down and write a letter, so that so-called representative government can really represent for once.



President



Psychoneurotics of Genius

Hawthorne, distinguished American novelist, is said to have been afflicted with a psychoneurosis from early childhood. His quiet life, wholly detached from the major activities of the times, was largely given over to brooding solitude.

The majority of psychoneurotics have no serious mental illness, but display merely an emotional imbalance which often can be greatly improved by appropriate psychotherapeutic and sedative management. In the treatment of psychoneurosis, particularly agitated, depressed and anxiety states, Mebaral is especially useful when tranquillity with minimal hypnotic action is desired. Sedative dose: Adults, from 32 mg. to 0.1 Gm. (½ to 1½ grains) three or four times daily. Children, from 16 to 32 mg. (¼ to ½ grain) three or four times daily. Supplied in tablets of 32 mg., 0.1 Gm. and 0.2 Gm.

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Special Article

INTRODUCTION TO THE STUDENT AMERICAN MEDICAL ASSOCIATION

By Lawrence McHenry

An organization representing medical students throughout the country has long been an idea in the minds of medical educators and leaders in the medical profession. This idea became a reality when, upon the suggestion of the A.M.A., delegates representing 48 medical schools met in Chicago in December, 1950. At this Constitutional Convention, the Student American Medical Association was born. Since the birth pangs of this first convention, there have been meetings of the Executive Council of the Student A.M.A. together with the wise advice and guidance of several members of the A.M.A. to see the organization through its infancy. Now after a year the new organization of medical students has finally begun to stand on its own feet with the publication of its own *Journal* and the first National Convention of the House of Delegates. At the present time the Student A.M.A. represents 44 out of 72 four year medical schools and over 15,000 students. It is the hope of the organization that it will represent all of the medical schools in the country by next June.

What is the purpose of this organization? The Constitution states that "the object of this association shall be to advance the profession of medicine, to contribute to the welfare and education of the medical student, to familiarize its members with the purpose and ideals of organized medicine, and to prepare its members to meet the social, moral, and ethical obligations of the profession of medicine." This is the general purpose. More specifically our new organinzation will offer many direct services and activities for the medical student. Some of these are: (1) Loans and grants to students for continuing their medical education: (2) the sponsorship of scholarships, or a year of advanced study to exceptional students; (3) to arrange for summer jobs, research opportunities, field studies, special summer scientific training, and clinical conventions or seminars; (4) to provide information for the use of the A.M.A. package library and medical motion pictures, and to disseminate other information regarding medical curricula; (5) to establish some organization and placement service for the intern in cooperation with existing facilities. The greatest asset, however, will be the *Journal* which will be published nine school months of the year. This journal will give the individual student the chance to publish papers of a scientific nature or on socio-economic aspects of medicine. It will provide an outlet for news items concerning news of local chapters, national legislation and trends pertinent to the medical profession, book reviews, editorials, etc. With this association the student will have an organization and a voice by which he may express his viewpoints and ideas; he will be able to develop his knowledge of aspects other than scientific concerning the medical profession, and will be better prepared to go out into practice than the student who had gained his knowledge only from medical school and internships.

The morphology and physiology of the Student A.M.A. is similar to that of its parent, the A.M.A. The Association is composed of Academic Societies chartered at medical schools in this country approved by the Council on Medical Education and Hospitals of the A.M.A. The legislative body of the Association consists of the House of Delegates which is composed of one duly elected delegate from each academic society. The House of Delegates will meet each year to undertake study of legislation and the formation of policy. The executive authority of the Student A.M.A. resides in the Executive Council which is composed of the officers of the organization, the president, vice-president, treasurer, executive secretary and seven elected council members plus three advisors appointed by the Board of Trustees of the A.M.A. The association has nine standing committees which consider all

policy to be formulated by the organization. The committees are: Publications, Internships, Selective Service, By-Laws, Medical Education, Conventions, Medical Service, Memberships, and one on liaison with the A.M.A.

The local chapter at the University of Oklahoma School of Medicine has about 200 members out of 280 students. The chapter here in Oklahoma was first organized last spring, but started off its activities this year with a boom. The Public Policy Committee of the State Medical Association gave a dinner for the local chapter this December. The president and president-elect of the State Medical Association, along with other prominent members of the Public Policy Committee gave short addresses to introduce the students to the activities of the State Association. The local chapter would like very much to work in close relationship with the Medical School Administration and the State Association so that upon graduation, students will understand more about the practice of medicine in Oklahoma and the workings of the various State and County Associations. The programs of the local chapters will be addresses and discussions about many of the socio-economic aspects of medicine, for example: State and Federal Legislation, Specialties vs. General Practice, the problems faced in establishing a practice, and community responsibility. Not only does the Student A.M.A. have great potentialities in the organization of students on a national level, but also here on a local level in our state. It is our belief that if we students can sit in on your state and county conventions and some of the clinical sessions and in general work in close relationship with the practicing physician, we shall be able to become a little more learned in many of those things it takes years to acquire in practice. Each month of the school year your local chapter of the Student A.M.A. will publish news of its programs and plans in the State *Journal*. If any of the physicians throughout the state have any ideas or suggestions which might be of benefit to our student organization, please send them to the Local Chapter of the Student A.M.A. at the University of Oklahoma School of Medicine. Next month we will publish a full account of the meeting of the first National Convention of the Student A.M.A. in Chicago.

PRECEPTORSHIP EXPANSION SCHEDULED FOR 1952-53

The School of Medicine's Preceptorship Program for senior medical students, now in its third year of operation, has proved popular both with the students and the preceptor and associate preceptor-physicians. A policy has been followed the past two years rotating approximately one-fourth of the preceptors, making possible the appointment of a majority of those physicians desiring to serve. The average size of the senior class during the three years has been 60 students, and assigning from three to four students to a preceptor has meant that 19 to 20 physicians have had the opportunity to serve each year. For the academic year, 1952-53, however, the senior class will number 80, and since experience has shown that it is preferable to assign three students a year to each preceptor, there will be room for the appointment of six or seven additional preceptors in June, 1952.

The School of Medicine will therefore welcome applications for preceptor appointments. Any member of the Oklahoma State Medical Association living in a non-metropolitan area of the state, who is willing to assume the responsibility of arranging for a constructive program of preceptorship-type training for three senior medical students, serving 11 weeks each beginning June, 1952, is encouraged to apply. Letters should be addressed to Dr. Mark R. Everett, Dean, School of Medicine, 801 N. E. 13th Street, Oklahoma City 4. If appointed, a preceptor will have the duty of providing room, board, and laundry of uniforms without cost to the student. He will have the privilege of recommending the appointment of associate preceptors in his locality to assist him in the training program. Both the preceptors and associate preceptors are made members of the general faculty of the School of Medicine for the year of their appointment.

The Committee on Perceptors, composed of two representatives each from the Alumni Asocittion, the Oklahoma State Medical Association, and the Faculty of the School of Medicine, will meet in the spring to review application and recommend preceptorship appointments. In order to be assured of consideration by the committee, applications should be submitted not later than March 15.

POSTGRADUATE SCHEDULE

a two day postgraduate course in practical psychiatry will be held at the University of Oklahoma School of Medicine, Oklahoma City, Oklahoma, Monday and Tuesdty, February 25 and 26, 1952. Dr. Lauren H. Smith, Professor and Chairman of Department of Psychiatry, University of Pennsylvania, will be the guest speaker. The course is being arranged by the Department of Psychiatry of the School of Medicine. It is being designed to present practical points in the diagnosis and management of psychiatric cases. It will be of interest to all physicians in Oklahoma. Registration fee $10.00. For further information concerning this course, write Office of Postgraduate Instruction, University of Oklahoma School of Medicine, 800 N. E. 13th, Oklahoma City, Oklahoma.

A postgraduate course in the fundamentals of electrocardiography will be held at the University of Oklahoma School of Medicine, Oklahoma City, Oklahoma, March 3 through March 8, 1952. The course will be conducted by Dr. Robert H. Bayley, Professor of Medicine, School of Medicine. The instruction time will be divided between lecture and laboratory periods. Tuition $60.00. For further information write Office of Postgraduate Instruction, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.

CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR

This is the fourth in a series of monthly articles designed to acquaint you with the current activities at the Oklahoma Medical Research Institute and Hospital. In the first article, the physical plant was described; in the second, the operational plans; and in the third, the key scientific personnel. The object of this article is to discuss a group of eight nationally-known scientists who have been appointed as an advisory group to the Director of the Oklahoma Medical Research Institute and Hospital, and to describe the background of these individuals.

The purpose of this National Advisory Board is to meet with the Director annually and discuss the scientific policies and research activities of the Oklahoma Medical Research Institute and Hospital. The activities of the Oklahoma Medical Research Foundation have attracted nationwide interest. Scientific research in the medical field knows no state or even national boundaries. Therefore, we decided to consult with the best advisors who could be obtained regarding the many problems which face a new institution in its earnest endeavor to initiate an outstanding program in medical research. The group that has been chosen includes not only experts in the fields of cancer, heart and metabolic disorders, but clinicians, basic scientists, and administrators with experience in dealing with the problems involved in the collaboration between several scientific institutions. In addition, there are several Deans of Medical Schools, and there are individuals who represent some of the national organizations concerned with research.

A list of the members of the board and a brief sketch of their background follows:

1. Chairman of the group is *Dr. Roy G. Hoskins*, at present Consultant in Medical Science of the Boston Branch of the Office of Naval Research. Doctor Hoskins is a physiologist who has always been particularly interested in endocrinology. He received an A.B. degree from Kansas in 1905 and a Ph.D. in 1920. He has taught and conducted research in Northwestern, Ohio State, and Harvard Universities. He was Director of Research of the Memorial Foundation for Neuro-Endocrine Research in Boston and an associate in the development of the Worcester Foundation. Doctor Hoskins was Editor of the *Journal of Endocrinology* for 25 years, and the Managing Editor of the *Journal of Clinical Endocrinology* from 1942 to 1945. He has been President of the Association for the Study of Internal Secretions in 1926, President of the Society for Research in Psychosomatic Problems in 1945, and President of the Gerontological Society in 1946. In addition to studies in the field of endocrinology, he has been interested in experimental psychiatry, and in the physiology and pharmacology of internal secretions.

2. *Dr. Joseph C. Aub*, who is Professor of Research Medicine at Harvard Medical School and Director of the Medical Laboratories of the Collis P. Huntington Memorial Hospital portion of the Massachusetts General Hospital in Boston, took his undergraduate training at Harvard and obtained his M.D. degree there. He received his clinical training at the Massachusetts General Hospital and at the Russell Sage Institute of Pathology. Doctor Aub is a Consultant at numerous hospitals. He has been with the U. S. Public Health Service as a Consultant and was a member of the Unitarian Teaching Mission to Czechoslovakia in 1946. He has been Vice-President of the Neuro-Endocrine Research Foundation, and President of the Ella Sachs Plotz Foundation. He was President of the Association for the Study of Internal Secretions in 1931, and has been President of the American Association for Cancer Research. He has been a member of the Association of American Physicians, and the American Society for Clinical Investigation. Doctor Aub has done pioneer work in the field of calcium metabolism and lead poisoning. He is interested in clinical medicine, metabolism, the glands of internal secretion, the inorganic salt disturbances, and malignant disease.

3. *Dr. Edward A. Doisy*, Director of the Department of Biochemistry and Professor of Biochemistry at St. Louis University School of Medicine, received his undergraduate training at Illinois and a Ph.D. degree in Biochemistry at Harvard. He has been Mathews lecturer, Harvey lecturer, Porter lecturer, Mellon lecturer, Stieglitz lecturer, Lower lecturer, Mayo Foundation lecturer, Eastman lecturer, Miller lecturer and Loeb lecturer. He has been on the Committee on Standardization of Sex Hormones for the League of Nations. Doctor Doisy characterized the hormone preparations that are made by the ovary, and for this work he was a co-winner of the Nobel Prize in 1943. He has received honorary Doctor of Science awards from five universities. He was awarded a gold medal from the St. Louis Medical Society and given the Squibb Award of the Association for the Study of Internal Secretions. He has served as a civilian with the Office of Scientific Research and Development of the U. S. A., and on the National Advisory Cancer Council. He has been a Councilor of the Society of Biological Chemistry, later Vice-President, then President of this organization. Doctor Doisy has been President of the Association for the Study of Internal Secretions and, also, President of the American Association for Cancer Research. He has been Vice-President of the Society for Experimental Biology. In addition to his work on the ovarian hormones and estrogenic substances, Doctor Doisy has been interested in the field of metabolism and has studied insulin, blood buffers, isolation and chemical characterization of estrogenic substances, gonadotropic and thyrotropic principles and antibiotic substances.

4. *Dr. Allan T. Kenyon*, Professor of Medicine at the University of Chicago, is a clinical investigator interested in the problems of metabolic conditions in man, particularly those relating to the field of glandular disturbances. Doctor Kenyon received his M.D. degree from Rush in 1926, and trained at the Harper Hospital in Detroit. He has been on the faculty at Northwestern University, and, more recently, at the University of Chicago. Doctor Kenyon has been Chairman of the Section of Clinical Investigation, of the Committee on Growth, of the National Research Council, and a civilian with the Office of Scientific Research and Development of the U. S. A. He is a member of the Association for the Study of Internal Secretions, the Society for Clinical Investigation, and the Association of American Physicians. Doctor Kenyon has been interested in endocrinology, especially in the properties of steriods and certain pituitary principles in man with reference chiefly to anabolic processes, the urinary excretion of

androgens in health and disease, the metabolic expressions of tumors in man, ovarian and associated growth defects, and the endocrine aspects of convalescence.

5. *Dr. C. N. H. Long*, who at present is Dean of the Yale University School of Medicine, was born in England and took his medical work at McGill University in Montreal, Canada. He was Instructor in Physiology at the University College in London, Lecturer in Medicine at McGill, Assistant Professor of Medicine at Pennsylvania, and Director of the Cox Medical Research Institute for a period. He has been Sterling Professor of Physiological Chemistry and Chairman of the Department at Yale since 1936. He has been Neubold lecturer of the American College of Physicians at Philadelphia, Hatfield lecturer, and Harvey lecturer. He received an honorary M.A. degree from Yale in 1936, and an honorary Doctor of Science degree from Princeton in 1946. Doctor Long has been a member of the Committee on Research in Endocrinology of the National Research Council, a Member of the Advisory Council of the Life Insurance Medical Research Fund, a civilian with the Office of Scientific Research and Development of the U. S. A., a member of the Scientific Advisory Board of the U. S. Public Health Service, and a Consultant of the Army Institute of Pathology. He was President of the Association for the Study of Internal Secretions in 1947. Doctor Long is a member of the Association of American Physicians and of many other scientific societies. He has been interested particularly in studies on exercise in man, the functions of the hypothalamus, the physiology of the endocrine system, and the metabolism of shock.

6. *Dr. J. Murray Steele*, who is Professor of Medicine at New York University, received his undergraduate training at Harvard and his M.D. degree at Hopkins. He had his clinical training at Baltimore City Hospital and the Johns Hopkins Hospital, and later at the Billings Memorial Hospital in Chicago. He served for a time as a research worker in the Rockefeller Institute, and for the past 11 years has been Director of the Third Medical Service of Goldwater Memorial Hospital in New York City. He has been a civilian with the Office of Scientific Research and Development of the U. S. A., and also served in the U. S. Navy. He is a member of the Society for Clinical Investigation, the Association of American Physicians, the American Heart Association, the Harvey Society, and the New York Academy of Medicine. Doctor Steele has been interested in rheumatic heart disease, the physiological nature of fever in heart disease, respiratory regulation, arteriosclerosis, and the aging process.

7. *Dr. C. J. Van Slyke* is Director of the National Heart Institute of the National Institutes of Health at Bethesda, Maryland. He obtained his medical training in the University of Minnesota and then served as a medical officer in the U. S. Public Health Service for a number of years, with posts in Washington, D. C., Illinois and New York City. He was Assistant Chief of the Venereal Disease Division in Washington, D. C., then became Chief of the Division of Research Grants and Fellowships of the National Institutes of Health. Doctor Van Slyke has been head of the National Heart Institute since 1948. He has been interested in venereal disease, sulufonamide and penicillin therapy in gonococcal infections, and cardivascular diseases.

8. *Dr. Stafford L. Warren*, who is Professor of Biophysics and Dean of the Medical School of the University of California, at Los Angeles, had his undergraduate training in California and took his M.D. degree there. He had clinical training in Johns Hopkins Hospital and in the Massachusetts General Hospital in Boston. He was a Rockefeller Fellow in Europe in 1926. He was an Assistant in Radiology at the Massachusetts General Hospital, then Assistant Professor of Medicine in the School of Medicine and Dentistry at Rochester, New York, and later, Professor of Radiology in this University. Doctor Warren was Director of the Manhattan District Project in 1943, and Chief of the Medical Section from 1943 to 1946. He has been a Consultant to the Atomic Energy Commission, to the Office of Scientific Research and Development of the U. S. A., to the U. S. Public Health Service, to the Veterans Administration, and to the National Research Council. He was Radiological Safety Advisor of the Bikini Tests in 1946. He served in the U. S. Navy from 1917 to 1919, and in the U. S. Army from 1943 to 1946. He is a member of the Society for Clinical Investigation, the Gerontological Society and numerous other medical groups. He has been interested particularly in fever therapy, malignant disease, industrial hygiene, arthritis, and vascular physiology.

The outstanding qualifications of these eight scientists assures that the Director will have readily available to him at all times expert advice on any of the problems which may confront him. We are proud that men of the caliber of the members of the National Advisory Board are willing to give their time and counsel to the new Oklahoma Medical Research Foundation and its activities.

Members of the National Advisory Board with Executives of the Oklahoma Medical Research Foundation.

Left to Right: Dr. C. N. H. Long, Dean of Yale University School of Medicine, New Haven, Conn.; Dr. Allan T. Kenyon, Division of Biological Sciences, University of Chicago; Dr. Edward A. Doisy, St. Louis University School of Medicine; Dr. Stafford L. Warren, Dean, School of Medicine, University of California, Los Angeles; Dr. Edward C. Reifenstein, Jr., Director, Oklahoma Medical Research Institute and Hospital; Dr. Roy G. Hoskins, Boston, Consultant in Bio-sciences, Boston Branch, Office of Naval Reserve (Chairman of the Committee); Dr. J. Murray Steele, Goldwater Memorial Hospital, Welfare Island, New York; Dr. C. J. Van Slyke, Director, National Heart Institute, Bethesda, Maryland; Dr. J. C. Aub, Massachusetts General Hospital, Boston; Mr. Hugh G. Payne, General Manager, Oklahoma Medical Research Foundation.

PASTEUR MEDICAL BUILDING OPENS IN OKLAHOMA CITY

One of the newest and most modern medical office buildings in the state is the recently opened Pasteur Medical Building at N. W. 10th and Lee, Oklahoma City.

Built at a cost of $1,250,000, the three story brick and limestone structure, has office space for 44 physicians, two dentists, two optical companies, one brace shop, one prescription shop, a general clinical laboratory and hay fever and asthma clinic and medical dispensary.

The building is equipped with year round air conditioning and an air purifier, copied from the system in the new United Nations building in New York City, which changes air every 37 minutes and removes contaminations.

Proudest boast of those housed in the building is the rosa mamor bust of Louis Pasteur encased in the appla flora marble of the main entrance. A suitable plaque of Pasteur could not be found but an expedition to a Paris mint uncovered an ancient coin bearing a likeness of the famous French scientist and it was sculptured in marble by Prof. Hans Gisler of Zurich University especially for the building.

TULSA COUNTY MAKES REPORT TO MEMBERSHIP

One of the most complete county medical society annual reports received at the Executive Office is that of the Tulsa County Medical Society for 1951.

Under the following topics, Bulletin Committee, Blood Center Committee, Cancer Committee, Clinic Committee, Community Chest Committee, Constitution and By-Laws Committee, Golf Committee, Ethics Committee, Finance Committee, Grievance Committee, Insurance Committee, Medical Credit Bureau Committee, Medical Library Committee, Military Affairs Committee, Program Committee, Public Health Committee, Public Policy Committee, Welfare Committee, and Annual Meeting Committee, the 10 page report gives complete and concise information concerning the activities of all branches of the Society Reports of two other committees, Fraudulent Practices and Finance, were given at the annual business meeting December 10.

Committee reports list the membership and duties of the committee in addition to the activities in which it participated during 1951.

COMMUNITY HONORS DOCTOR, WIFE

Sharing honors with his wife, I. V. Hardy, M.D., long time Medford physician, was recently honored by the citizens of Grant county for his 50 years of medical care and community service.

Included in the ceremonies was the presentation of a 50 Year Pin and Life Membership certificate to Doctor Hardy by F. M. Duffy, M.D., Enid.

Doctor Hardy, who is 81, began the practice of medicine at Deer Creek where he resided for nine months before coming to Medford.

The ceremony, which was a complete surprise to Doctor and Mrs. Hardy, was held in the school building with more than 500 patients of Doctor Hardy and former music students of Mrs. Hardy present. Gifts presented to the Hardy's from the townspeople included an electric blanket, gold wrist watch, and the balance in cash that was oversubscribed for the gifts—$700.

ANNOUNCEMENTS

WASHINGTON'S BIRTHDAY CONFERENCE, Oklahoma City, February 22.

OKLAHOMA ACADEMY OF GENERAL PRACTICE, Tulsa Hotel, Tulsa, Oklahoma, March 17 and 18.

AMERICAN COLLEGE OF PHYSICIANS, Cleveland, Ohio, April 21-25.

OKLAHOMA STATE MEDICAL ASSOCIATION, Oklahoma City, Oklahoma, Municipal Auditorium, May 19-21.

CHICAGO MEDICAL SOCIETY CLINICAL CONFERENCE, Palmer House, Chicago, March 4, 5, 6, 7, 1952. Complete program will be mailed upon request. In response to popular demand, the 1952 program will show an increased number of demonstrations or workshop periods in addition to the regular series of lectures.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY announces the election of Dr. John L. Parks of Washington, D. C., as a member and Director of the Board. Doctor Parks succeeds Dr. Joseph L. Baer, who has been Vice President of the Board for over 20 years and who has resigned.

FOURTH ANNUAL NEUROPSYCHIATRIC MEETING will be held at the Veterans Administration Hospital, North Little Rock, Arkansas, February 28 and 29, 1952. In addition to many well known guest lecturers who will participate in the scientific sessions, there will be approximately 10 clinical demonstrations and 30 technical exhibits. There will be no registration fee. Further information may be obtained by writing Dr. Edwin S. Chappell, Director of Professional Education, Veterans Administration Hospital, North Little Rock, Arkansas.

WRITES FROM JAPAN

Capt. Richard F. Shriner, Jr., formerly of Hobart, writes from Japan that he has recently been transferred from the 279th General Hospital at Osaka to the 40th Infantry Division in Sandai, Japan, where he is orthopedic consultant for the division. He received the Korean Service Medal for his work at the 279th General Hospital where all the work was with Korean casualties. His address is: Capt. Richard F. Shriner, Jr., 0-447565, 115 Medical Bn., 40th Inf. Div., APO 6, c/o Postmaster, San Francisco, Calif.

F. M. Duffy, M. D., Enid, and I. V. Hardy, M.D., Medford (right), view Doctor Hardy's Life Membership Certificate.

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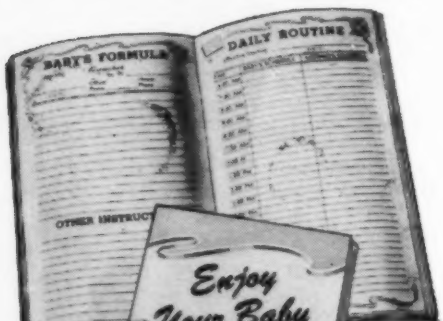

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BOOK REVIEWS

STATISTICS FOR MEDICAL STUDENTS and Investigators in the Clinical and Biological Sciences. Frederick J. Moore, M.D.; Robert G. Knowles, M.A.; Frank B. Cramer, B.A. 113 pages with many illustrations. The Blakiston Company. 1951.

This is a concise presentation of the concepts of variation and probability which are the fundamental bases of statistics.

Chapter I deals with variation and the normal curve of error; the second chapter is devoted to fitting the normal curve of error to the data; Chapter III deals with sampling distribution and tests of significance; the fourth chapter has to do with the problem of non-normal distributions, and the fifth chapter deals with the general aspects of the design of experiments and presentation of results. The appendix includes (A) Summary and page index of methods for numerical calculations, (B) Calculation of normal equivalent deviates and (C) Numerical tables.

This is a very excellent book presented in a clear, straightforward manner which is concerned chiefly with providing the student with a grasp of the fundamental concepts and philosophies of statistics. The practical importance of such knowledge is emphasized since it is essential to the student who daily deals with measurement and evaluation of quantities.

All students and investigators in medicine and its basic sciences should be familiar with the contents of this book.—John M. Moore, Senior Student, University of Oklahoma.

PEPTIC ULCER, American Gastroenterological Association, David J. Sandweiss, M.D., F.A.C.P., Editor, W. B. Saunders Company, Philadelphia, 1951, 790 pages.

This excellent book is a fine example of how an organization devoted to a specialty can utilize its knowledge and diffuse its information.

This treatise is written by 77 experts in their respective fields and covers all aspects of peptic ulcer including not only practical anatomy and physiology, diagnosis, treatment, complications but also a section on surgery.

There is an excellent chapter on pre and post-operative care. Due to the fact that many authors have written chapters there is necessarily some repetition but this often adds rather than subtracts to the book's completeness as the repetitive statements are not always in agreement thus reflecting the present lack of accurate knowledge in respect to certain phases of the problem.

This organized wealth of information is written in a concise manner throughout and unnecessary details are avoided thus making it a recommended reference for the non-specialist as well as the specialist.

There is an excellent chapter on the commonly used drugs and the author is to be commended for using the trade names as well as the chemical names. This certainly increases the usefulness of the information.

One might have expected such a comprehensive book to have included a short chapter on post-bulbar ulcer but there are only a few casual references to this condition. Perhaps this is as much as the editor felt it deserved.

It is regrettable that a resume of the full report on

MEDICAL SOCIETIES AROUND THE STATE

Okfuskee County

L. J. Spickard, M.D., was named president of the Okfuskee County Medical Society when the group met recently in Henryetta. Other officers elected were W. P. Jenkins, M.D., vice-president; Charles R. Reynolds, M.D., secretary-treasurer; and Norman E. Gissler, M.D., censor. John A. Bransfield, M.D., was elected delegate.

Seminole County

Homer Marsh, M.D., associate dean of medicine at the University of Oklahoma School of Medicine, was guest speaker at a recent meeting of the Seminole County Medical Society.

Northwest Counties

When the Northwestern Counties Medical Society met recently at Fort Supply, the program was presented by members of the Oklahoma Society of Neurologists and Psychiatrists and members of the State Board of Health.

Officers were also elected for the coming year. They are: Frank E. Flack, M.D., President; J. J. Smith, M.D., Shattuck, vice-president; and James C. England, M.D., secretary-treasurer. Delegates elected are M. H. Newman, M.D., and J. L. Duer, M.D.

LeFlore-Haskell

1952 officers of the LeFlore-Haskell Medical Society are G. M. Hogaboom, M.D., Heavener, president; C. S. Cunningham, M.D., Poteau, vice-president; J. R. Rigual, M.D., Wister, secretary-treasurer.

Rogers-Mayes

E. H. Werling, M.D., outgoing president of the Rogers-Mayes County Medical Society, entertained the society at a turkey and ham dinner at the last 1951 meeting.

New officers elected are M. E. Gordon, M.D., Claremore, president Warren G. Gwartney, M.D., Pryor vice-president; and W. D. Anderson, M.D., Claremore, secretary-treasurer.

Tulsa County

Marshall O. Hart, M.D., is the 1952 president of the Tulsa County Medical Society. 1952 officers elected at a recent meeting are: John G. Matt, M.D., president-elect; W. D. Hoover, M.D., vice-president; Paul T. Strong, secretary-treasurer; and Walter E. Brown, M.D., and J. D. Shipp, M.D., delegates. Named to life membership were Thomas B. Coulter, M.D.; Robert E. Lee Rhodes, M.D., and Silas Murry, M.D.

Creek County

P. K. Lewis, M.D., Sapulpa, was named president and D. L. McAllister, M.D., Bristow, was elected vice-president of the Creek County Medical Socitey for 1952. W. M. Hindman, M.D., Sapulpa, was elected secretary-treasurer.

Custer County

President of the Custer County Medical Society for 1952 is Paul Lingenfelter, M.D. New secretary is Curtis B. Cunningham, M.D.

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the status of vagotomy was not complete in view of its equivocal status.

This is an exceptionally good bibliography at the end of each chapter.

The index in general is good yet some difficulties may be encountered in using it.

The American Gastroenterological Association is to be congratulated for this worthy endeavor and the book's editor and associate editors deserve a share of the kudos.—Minard F. Jacobs, M.D.

POSTGRADUATE COURSES

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OBITUARIES

K. M. DWIGHT, M.D.
1866-1951

K. M. Dwight, M.D., 85, pioneer Muskogee physician, died suddenly at his home December 10. Doctor Dwight, who was a native of New York, came to Muskogee in 1908. He is survived by two brothers-in-law and one sister-in-law.

A. M. MIXON, M.D.
1866-1951

A. M. Mixon, M.D., 85, Spiro physician for more than 50 years, died November 28 in a Talihina hospital where he had been ill for several months.

Survivors include his widow of the home, three sons, one daughter, a step-daughter, and 11 grandchildren.

ROBERT McHENRY CALEB, M.D.
1860-1951

Robert M. C. Hill, M.D., McLoud physician and retired Methodist minister, died Thanksgiving day.

Dr. Hill was born June 19, 1860 at Prospect, Ohio. He was graduated as an M.D. from the Chicago School of Medical Surgery in 1883, later graduating from the Toledo Medical College and received his master's degree in medicine from the Ohio Normal University, Ada, Ohio, and was awarded a doctor's degree from the Chicago School of Medicine in 1890. He practiced in McLoud until 1914 when he entered the ministry. He received his Doctor of Divinity degree from Taylor University, Upland, Ind., in 1922. He held pastorates at Ada, Talihina, Hartshorne, Coalgate, Prague, Asher, Kiowa, Spiro, Afton and Wright City before he retired and returned to McLoud.

He was well known for his community service, including church, lodge and medical activities.

GUY CLARK, M.D.
1874-1951

Guy Clark, M.D., 77-year-old retired Sulphur physician, died November 22 following a nine day illness.

A resident of Sulphur for the past 11 years, Doctor Clark formerly lived in Milburn where he practiced for more than 45 years. He was a member of the Presbyterian church, and the AF and AM Blue lodge at Milburn, the Consistory at McAlester, and the KCCH at McAlester, and a member of the India Temple of the Shrine in Oklahoma City.

Survivors include the widow of the home, two sons, one daughter, three brothers and one sister.

RESOLUTION

Whereas, the passing of Doctor J. H. Humphrey has been keenly felt by his colleagues of the Medical Profession, and the citizens of his community he has served with loyalty and understanding far beyond the call of his profession, and,

WHEREAS, his passing will leave a void, not only in the hearts of his family, but in the hearts of all who knew him, and,

WHEREAS, his benevolent and co-operative spirit will be missed at Medical and Civic Meetings,

NOW THEREFORE BE IT RESOLVED, that we the members of the Northwestern Medical Society, do hereby express to the relatives of Doctor Humphrey our sympathy, that we make known our sentiments and that a copy of this resolution appear in the minutes of the NORTHWESTERN Counties Medical Society, and a copy be sent to the Oklahoma State Medical Association.

Adopted this 13th day of December, 1951.

NORTHWESTERN COUNTIES MEDICAL SOCIETY
s/ M. H. Newman, President
M. C. England, Secretary

C. E. Williams
Ray J. Camp
Committee on Resolutions

RESOLUTION

WHEREAS, the members of the LeFlore-Haskell County Medical Society being mindful of their loss in the death of Dr. Aaron M. Mixon, and,

WHEREAS, the said members being desirous of recording this sense of loss, and,

WHEREAS, it is the wish of the Society as a whole that this feeling be conveyed to the wife and children,

NOW THEREFORE BE IT RESOLVED, that the members of the LeFlore-Haskell County Medical Society accept these resolutions as evidence of the deep respect in which the memory of Doctor Mixon is held, and,

BE IT FURTHER RESOLVED, that a copy of these resolutions be spread upon the minutes of the Society to be preserved in perpetuity of the memory of Doctor Mixon, and,

BE IT FURTHER RESOLVED, that a copy of these resolutions be sent to the family as an expression of our, the Society's, deepest sympathy.

s/ N. K. Williams, M.D., President
G. M. Hogaboom, M.D., Secretary

Poteau, Oklahoma
December 7, 1951

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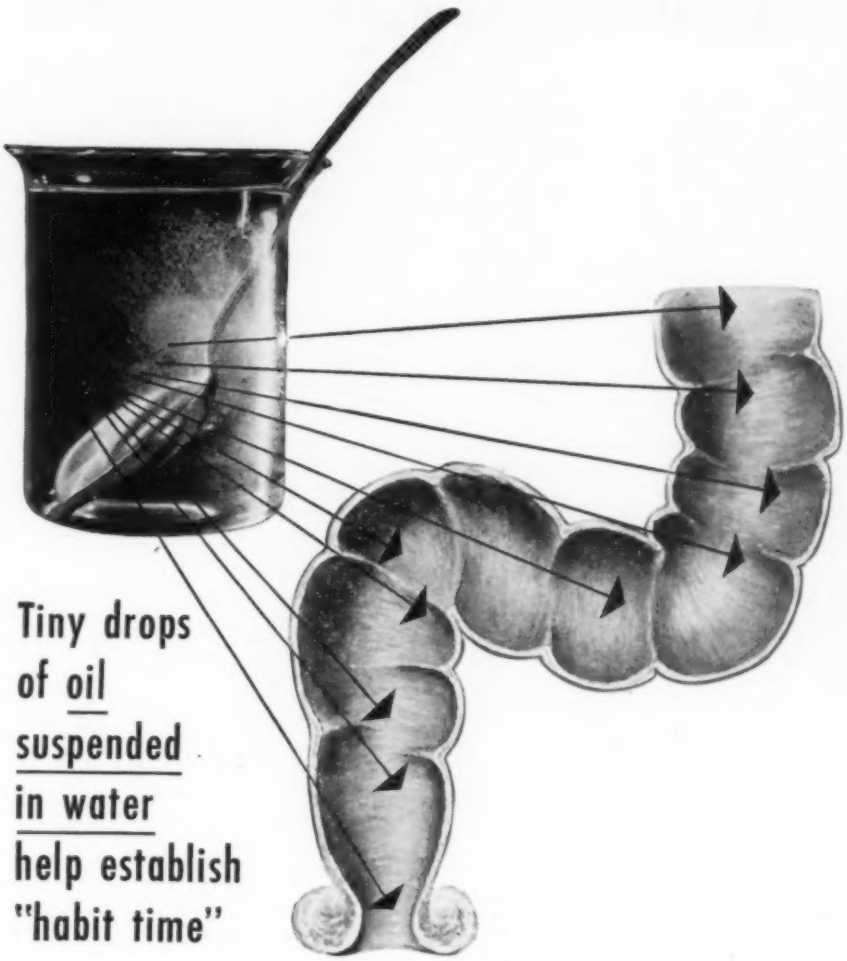

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OKLAHOMA DEFENSE BLOOD CENTER NOTES

J. R. B. BRANCH, M.D.
MEDICAL DIRECTOR

The response to the nationwide appeal for blood has been extraordinary, and during the month of November, all over the country a total of approximately 80,000 pints were collected. Thsi has overtaxed the facilities of the processing laboratories to such an extent that we have all been asked to limit our collections for the time being to keep within their facilities. This has meant that in Oklahoma we have had to limit our recruitment of prospective donors to a number sufficient to meet our quota, which is at present 3,333 pints per month. Consequently, a number of groups of individuals have been rather disappointed that they were unable to give blood now. We have tried to make it clear that this slow-down is temporary and made in an effort to give a regular and sustained production. Those who cannot give blood now will certainly be called upon a little later. We expect the need to continue month by month and should be adequate to meet all the needs of the armed forces as we see it today.

As of December 20, we have collected and shipped, 7,050 pints of blood. Until December 17, all of this was sent to a processing laboratory for conversion into plasma. Beginning Monday, December 17, we began to ship a certain amount of whole blood to be sent to Korea. The first of this was received at an operation set up in the Oklahoma Medical Research Foundation, which is our present headquarters; the donors were made up of staff and employees of the Research Foundation, Red Cross, Medical School and Hospital. One hundred forty prints were secured that day.

Alberta Webb Dudley, M.D., has been appointed Assistant Medical Director of the Oklahoma Defense Blood Center and began her duties on January 1. This, with the addition of a full-time assistant in the Central Supply Room, will complete our staff and enable us to meet our obligations as they exist today.

All the county medical societies have been requested to designate a medical advisory committee, which through its chairman will work with the chairman of the local Red Cross chapter's Blood Program committee. It is hoped that these appointments will be made in the near future and that these represenaives will be in Oklahoma City twice a year. W have had very gratifying response from the medical societies in supporting the program and in providing local medical coverage for operations in the participating counties. So far 32 operations have been completed in the participating counties, and 20 in Oklahoma City.

GRADY COUNTY REPORTS

Representing Grady County, C. W. Ohl, M.D., medical chairman of the Grady county Red Cross chapter and chairman of the Blood Donation Committee of the Grady County Medical Society, gave the following report of activities there.

November 12 and 13 the Bloodmobile Unit No. 2 visited Chickasha with headquarters at the Christian Church. During the seven hours of operation on Monday the unit collected 175 pints of blood, which was the top amount on any unit within this Red Cross district for the period of time. Oklahoma City collected 169 pints of blood in 10 hours at the WKY studio. The total for the two days was 333 pints and of the 76 rejectees, the bigger percentage were temporary, which included people with low hemoglobin, acute infections and recent operations. The group of permanent rejections included patients with heart trouble, chronic kidney disease, history of tuberculosis, active and few cases of hepatitis and malaria within the last six months.

Physicians cooperating included the following: J. H. Foertsch, A. W. Hoyt, R. G. Stoll, R. R. Coates, B. C. Chatham, H. H. Macumber, H. M. McClure, L. E. Woods, W. W. Davis and S. D. Revere. Under the direction of Mrs. Ohl, the doctors' wives and many other R. N.'s cooperated 100 per cent.

On November 21 the unit visited Verden at which time we collected 86 whole pints of blood with 24 rejected. The total for Grady County therefore was 419 pints and 519 total applications for donation.

HAVE YOU HEARD?

Gene Slagle, M.D., formerly of Oklahoma City and more recently of Holdenville, has received a naval reserve commission and is now stationed at Memphis, Tenn.

Jack Fetzer, M.D., is now Associated in practice with D. L. Benson, M.D., in Cherokee.

John McDonald, M.D., Tulsa, chairman of the O.S.M.A. Public Policy Committee was guest speaker at the Oil Capital Business and Professional Women's club recently. His topic was "Full Partnership with your Medical Profession."

Charles E. Green, M.D., Lawton, attended a meeting in Washington recently of the children's bureau which is in charge of appropriations for crippled children's clinics. He is chief of staff of Comanche County Memorial Hospital, which is co-sponsor of monthly crippled children's clinics held in Lawton under the auspices of the Oklahoma Crippled Children's Commission.

Finis Ewing, M.D., Muskogee, was recently presented a 50 year gold Masonic certificate and button at a special meeting of Muskogee Lodge No. 28, A. F. and A. M.

Dick Graham, executive secretary, spoke to the Norman Lions club on "Government and Medicine" at a recent meeting.

Gilbert L. Hyroop, M.D., has opened his offices in the Osler Annex, 1220 N. Walker, Oklahoma City.

Henry H. Turner, M.D., was guest lecturer December 14 at Veterans Hospital, Amarillo, Texas. He spoke on "Clinical Syndromes of the Adrenal Cortical Hyperactivity."

T. H. McCarley, M.D., McAlester, attended the National Public Health Conference in Washington, D.C., as an Oklahoma delegate.

Malcom Horne has opened his new offices in the Bowman building, 111 Stanley Blvd., Ardmore, Okla.

Loraine Schmidt, M.D., has assumed direction of the health services in Creek, Rogers and Wagoner counties.

Bernard Lowenstein, M.D., superintendent of the Shawnee Tubercular Sanitarium since April, 1946, has moved to Albuquerque, New Mexico, where he is Medical Administrator in the Veterans Administration.

Ernest Lachman, M.D., professor of anatomy at the University of Oklahoma School of Medicine, was inducted into the Oklahoma Hall of Fame recently.